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Missouri Medicine

Journal of the Missouri State Medical Association

January 1991

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"*Evening Flight,*" is an 18 X 24 oil painting by **Stan G. Smith**, a Missouri artist from Columbia, Missouri. The painting depicts one of many beautiful Boone County sunsets. Mr. Smith, a freelance artist, also works as a pharmacist at the Truman Medical Veterans Hospital in Columbia.

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GUEST EDITORIAL

by Milton B. Ozar, M.D.

We, as physicians, must act as responsible professionals in the face of adversity, recognizing the needs of our society, so that we may actively gain support for the practice of medicine.

The Transformation of American Physicians From Professionals Into Providers

We constantly hear and read about the changes affecting medicine today, and we tend to think of these changes in terms of our own experiences. To understand what is happening today, we must appreciate what transpired in American medicine during the past 200 years. In the words of George Santayana, "Those who cannot remember the past are condemned to repeat it." Reviewing our medical past allows us to appreciate how much medical care has changed. In doing so, we can see our present state of affairs as another step in the evolution of our social system.

Physicians in the United States occupy a position of professionalism unparalleled in the Western world. It was not always that way, as physicians have not always enjoyed positions of honor and comfort. During the Roman Empire, medicine was considered a low-grade occupation, and physicians consisted primarily of slaves and foreigners. During the 18th century English physicians struggled for economic and social recognition, while in 19th century France, physicians also claimed little material wealth. The successful French physician of the time sought general cultivation rather than professional accomplishment.

In the American colonial era, "Doctor" was used by all manner of people practicing medicine, including store keepers and people of lower ranks. It was also common during the 17th and 18th centuries for clergy to combine medicine and religion and serve their congregations in both capacities. In fact, the first president of the first provincial medical society organized in New Jersey in 1766, was a clergyman. In the first 10 years of its existence, six of the 30 members of the medical society were pastor-physicians. It was not until the mid-18th century that persons practicing medicine began doing so as a primary role and emerged as a corporate group.

American physicians began seeking professional recognition in the late colonial period. Some of the educated physicians tried to emulate England by developing institutions in America that would give them distinct status. However, they did not succeed in their efforts to establish medicine as an exclusive and privileged profession. In fact, physicians' claims to privileged competence during the Jacksonian period of the 1830s and 1840s evoked a sharp backlash that stifled their ambitions for almost 50 years.

To make matters worse, state legislators voted to do away with medical licensure entirely. No professional status was allowed. Medical doctors had to compete with lay practitioners who rejected the therapies of regular physicians and claimed the right to practice medicine as an inalienable liberty comparable to religious freedom. There

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was a popular resistance to the claim made by physicians to privileged status. This resistance represented a general conflict in American life between democratic culture and a stratified society.

In addition to the status conflict, medical doctors had dissension within their own group. During the early 19th century, the effectiveness of medical therapy was questioned by some leading physicians of the period. This disagreement among physicians caused further weakening of their status. Disaffection was so widespread by 1850 that it led to the development of three distinct spheres of medical practice, each of which was of equal importance. They were categorized by Paul Starr, in *The Social Transformation of American Medicine*, as: 1) medicine of the domestic household, 2) medicine of physicians, and 3) medicine of lay healers. Each sphere exhibited in a distinctive way, the continuing conflict in American life between the democratic respect for common sense and professional claims of special knowledge.

The first sphere, domestic medicine, was provided by women in the home who administered medicinal herbs and remedies to their families during illnesses. The second sphere was medicine by physicians. As mentioned earlier, medicine as a profession was affected by America's culture. By its very nature, a profession is not an egalitarian institution. It claims to enjoy a dignity not shared by ordinary occupations and a right to set its own rules and standards. The claims by physicians were considered undemocratic. American physicians in the first half of the 19th century could not gain sufficient power to obtain legitimacy in order to accomplish the task of separating themselves from other practitioners.

It was different in Europe, though. Physicians in 18th century England were socially reflective of the hierarchy characteristic of their society and represented a small elite group separate and distinct from surgeons. Physicians were members of a learned profession as opposed to surgeons who were placed in a lower order since they practiced a craft. Apothecaries were categorized as a trade. In England, physicians were considered gentlemen and as such, could not work with their hands. They practiced by observing, speculating and prescribing. English surgeons, until 1745, were members of the same guild as barbers. The American medical profession did not develop along the same lines as the English. Trained practitioners during colonial times were the equivalent of surgeons and apothecaries.

The third sphere, lay medical practice, occupied an area between domestic and professional medicine. This group was largely made up of botanic practitioners and midwives, but also included career doctors, bone-setters, inoculators, abortionists, and sellers of nostrums. Many were itinerant and a large number were women. As a result of having three spheres of medical practice, there was a great deal of "therapeutic" confusion during the first half of the 19th century.

The beginning of modern clinical methods developed following the French Revolution when reformers in medical education called for an end to metaphysical abstractions and placed an emphasis on clinical observation. American physicians sought professional recognition through licensing within their states. State legislatures in the 1820s enacted licensing laws, but began rescinding them in rapid order in the 1830s. Licensing was destroyed because of the suspicion that it was an expression of favor rather than competence.

The economics of medicine was quite different between America and Europe in colonial times. Medical practice in America was more forthrightly acknowledged to be commercial. English law regarded physicians' services to be wholly philanthropic. This was not the case in early America. Because of abuses in charges, Massachusetts and Virginia legislatures passed laws regulating professional fees and the Virginia Assembly passed a Medical Practice Act providing judicial action against "griping and avaricious" doctors levying exorbitant charges. Mind you, this was in the 17th and 18th centuries. From the Jacksonian period through the end of the 19th century, a medical career did not carry the prestige and relative security it does today. Early American medicine also had its share of turf battles. Homeopathy as a sect, had many adherents and recruited some physicians who had practiced conventional medicine. The competing groups became enbroiled in a battle within the American Medical Association (AMA), the military, and the courts. In 1875, Michigan legislature required the incorpation of homeopathy into the University of Michigan Medical School. The two groups continued to bicker until 1880 when they joined in an effort to restore licensing. Medical licensing finally came of age in 1877 with the passage of a landmark act by the state of Illinois that established a state board of examiners. The legitimacy of medical licensing was contested and came before the Supreme Court in 1888. The Court unanimously upheld the state law.

Medical education underwent some changes also. Two developments deserve to be noted. The first medical college to place their professors on salary rather than dividing up the fees was Harvard in 1871. In 1893, Johns Hopkins introduced a four-year program requiring all entering students to have a college degree. Another monumental event occurred in medical education as a result of the Flexner Report published in 1910. Severe problems existed in medical education and after Abraham Flexner completed his investigation of medical schools, American medical education standards were finally established. As a consequence, the medical profession gained enormously in prestige and became a highly desirable career. Physicians as a group had little power, but because of the complex changes occurring throughout society, they were able to see social interests defined to conform with their own.

Internships began to flourish in the 20th century and by 1923, there were enough openings to accommodate all graduates. Medical specialization received an impetus from the military in World War I. Many physicians who claimed to practice a specialty were found to be unqualified on examination. The AMA recognized the need for reform in graduate education but was reluctant to move aggressively because of the large number of general practitioner members. Certification by medical specialty boards developed outside the AMA beginning in the 1930s.

Within my lifetime, the world has witnessed technological advances, scientific breakthroughs, and political and social changes that have changed the way we practice medicine. Change continues to affect the medical profession. European physicians still practice under a different system than their American colleagues, but there has been a role reversal when it comes to postdoctoral training. The quality of medical care in the United States is unequalled, yet our society is unhappy with health care costs and the lack of universal availability. The Great Depression in 1929 was followed by the election of Franklin D. Roosevelt, who in 1935 with his New Deal, guided the Social Security Act through Congress. Blue Cross as a hospital care insurance plan, originated in Dallas at Baylor University in 1929. World War II stimulated the emergence of collective bargaining and group health insurance.

Medicare and Medicaid entered our lives in the 1960s and now we deal with HMOs, PPOs, and other managed health care plans. We again find ourselves battling over the question of who controls the health care plans. You have all witnessed the metamorphosis of our hospitals into medical centers, the changing role of nurses and technicians, the growth of malpractice litigation, and the development of a massive pharmaceutical industry. Group practices and clinics have become the rule rather than the exception.

In the past 20 years, we have seen the emergence in health care of new industrial terms — provider and consumer. Webster's Dictionary defines provider as "one who provides, furnishes, or supplies: one who procures what is wanted." As the term implies, it is a broad category. On the provider side, physicians are but a part along with hospital personnel, nursing home administrators, drug salesmen, and insurance agents. All professions lost an important part of their heritage when ethics changed to allow for advertising. We are now a marketable provider and presented to the public in sales pitches reminiscent of Barnum and Bailey. Competition in the past was based on professional skill and competence. Now competition is based on economic value in the marketplace. After a turbulent 200 years working to establish dignity and quality to our profession, our status is being threatened once again by the social planners and the entrepreneurs of the business world. We are now in the process that I call de-professionalization — a process during which our medical practice is regulated and manipulated by non-medical personnel, while at the same time, society de-regulates just about everything else.

Physicians look at the recent past as the golden age of medicine and believe that what is occurring now is wrong and harmful. We are told again that surgeons are craftsmen and don't think. We are told that if they do think, surgeons want to know how long they think so that they can be paid for their cognitive time.

We are also told that we do unnecessary surgery and that we charge too much. Society has coined another term for rationing health care — expenditure targets. Some of us react with anger, while others grieve for the demise of the good old days. Still others simply take early retirement. Our attitudes are based on our perceptions. Our perceptions of the complex health care industry is analogous to our ancestors' visions of the the universe. Professor Edward Harrison, in his book, *Masks of the Universe*, writes about man's ever changing views of his universe. He says

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Guest Editorial

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that people in the past believed intensely in their particular universe. We know now that they were mistaken in their beliefs and attribute their mistaken beliefs to ignorance. If what happened in the past is any guide to what will happen in the future, then conceivably our modern beliefs may be mistaken also and future generations will look back in history and see our 20th century ideas as mistaken as all the rest.

It would be presumptuous of me to tell you that I have a solution to the present dilemma. I can tell you, however, what we can learn from this recitation of our history. We can appreciate that it has been a continuing struggle to gain and maintain our professional status. We can appreciate that our fate is often determined by the changing attitudes and needs of our society. Perhaps most important, we recognize that there were and are individuals within our profession who have the intellectual capacity to guide us through difficult times. In the midst of what appears to be a moral decay and lack of social values, we in the medical profession have an even greater burden. Medical progress and social change are inevitable, but there is one facet of our profession that I hope and pray will never change — our ethical values. We have been left with a legacy of ethical conduct codified by Hammurabi, Hippocrates, and Maimonides. Ethics and moral values allow us to judge what is right and wrong. For those situations where it is not obvious what is right and what is wrong, our ethical values should guide us to discover what is the right thing to do. I hope we can stand strong in our conviction of what is morally right in the medical care of our patients and that these values never change.

I leave you with a challenge expressed in a thought provoking statement by Karl Polyani, author of *The Great Transformation.* It applies to the medical profession as a class. "The strength of classes depends upon their fulfillment of tasks set by interests wider than their own." To meet this challenge we must, as physicians, act as responsible professionals recognizing the needs of our society so that we may then go outside our own membership and win support for our cause.

Recommended Reading

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3. Harrison, E: *Masks of the Universe.* New York: MacMillan Press, 1985.
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FYI

Health care workers number 7.5 million — more than 6% of the total private labor force in America.

Source: Bureau of Labor Statistics

A message from The American Medical Association for the Health Access America Proposal

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EDITOR'S DESK

by Donald G. Sessions, M.D.
Editor

The Question of Money

In his book, *The Way of the Physician*, philosopher Jacob Needleman discusses what he describes as the Financial Disease of Modern Medicine.[1] "The entire medical profession is trembling before the question of money," he writes, "questions of cost-effectiveness, cost-competition, utilization and acquisition of costly technology, the solvency of the hospital as a business institution, the individual physician's income, the formation of the medical corporation, etc."[2] He examines the extent to which financial considerations are beginning to affect physicians and patient care. As a philosopher, however, he approaches the issue in a unique way, by looking at contemporary man's singular relationship to money and its relationship to the emotions.

"For many people brought up in the conditions of modern life," he declares, "the study of one's relationship to money is the quickest and most acceptable means of approaching the observation of one's own emotions in the moment they are transacting."[3] Money, he says, enters into almost everything in the life of contemporary man. The real influence of money is invisible.[4] Yet, money has the power to make things real. When the question of money and payment enters into any situation, then it is out of the realm of fantasy and closer to reality. "Money," he says, "quantifies a situation."[5] "The question of money," he says, "enters deeply into the emotional formation of almost all contemporary men and women when they are very young and that therefore there can be no authentic moral development in a contemporary individual until he has squarely faced, through experience, the question of money."[6]

Our moral development as human beings, says Needleman, is somehow attached to our relationship with money. This is so for all individuals, but the issue is especially open and public for physicians. Physicians live in two worlds: the world of "caring" for patients and the world of business. Historically, there has been a metaphysical demand on physicians to administer to both the physical and the inner or higher aspects of patients. But physicians also must live in the practical world and this world, Needleman points out, is confronted by the world in which the laws of compassion are unbreakable.[7]

It is this confrontation, he says, that creates the conditions for the moral and spiritual conditions of man.[8] Physicians must care for the physical body and attend to the inner man and do it in a world of commerce and money. He must blend paid-for services with conscious devotion to a higher calling, pragmatic medical treatment with the search for consciousness; money with spiritual love. There can be no resolution without full awareness of the

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contradictions.[9] "The physician," says Needleman, "is the man who makes money while experiencing the metaphysical facts of life and death in his neighbor."[10]

The Financial Disease of Modern Medicine is brought about by the contradictions between concern about the practical matters of daily life such as overhead, interest payments, tuition, taxes, investments, hospital privileges, technologic advantage, competition, and the art of medicine. It is about the moral questions that arise in the confrontation between the threats to personal income and the higher caling of the profession to care for others. Yet, the treatment of the Financial Disease of Modern Medicine, says Needleman, is not about making physicians into saints or tycoons.[11] The question, he says, is "how to discriminate between the feelings that move man toward the unity of inner Being and the emotions that motivate the outer life of man."[12]

It is helpful to look at the problems caused by changes in the way people receive their health care. Payment for medical "service" has transferred from individuals to corporate third parties such as the government or business contracted insurors. The art of medicine becomes the delivery of health care. Health care becomes a thing, a commodity.[13] Payment for technological procedures is seldom questioned. Financial reward for being a caring physician is more difficult to quantify, for caring for the sick cannot be treated entirely as a commodity. It requires, according to Needleman, faculties other than laws of rationalistic societal order.[14]

The question of money is a moral issue for physicians. We have a wide variety of responses available to us. To some there will be less personal income, ability to see fewer patients, loss of certain privileges, and the necessity to be more aggressive or even break "rules" to give proper care.[15] Others will feel the need to compromise, find creative ways to get around new situations, and engage in attempts at manipulation of the system. The power of looking at the question of money, says Needleman, is that it allows us to look at ourselves and at the inherent love of truth and our calling hidden under the cover of money.[16]

References

1. Needleman J: *The Way of the Physician.* San Francisco: Harper and Row, 1905.
2. ibid, p 131.
3. ibid, p 134.
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5. ibid, p 135.
6. ibid.
7. ibid, p 136.
8. ibid.
9. ibid, p 138.
10. ibid, p 137.
11. ibid, p 138.
12. ibid.
13. ibid, p 137.
14. ibid.
15. ibid, p 141.
16. ibid.

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The 133rd Annual Convention of the Missouri State Medical Association will be held April 3-7, 1991, at the Crown Center, Kansas City, Missouri.

Resolutions to be introduced at the 1991 House of Delegates must be submitted to MSMA Headquarters by **February 18, 1991,** so that they may be published in the Delegate's Handbooks.

Resolutions not submitted before the deadline must be introduced under the procedure outlined in the MSMA Bylaws, Chapter III, Sect. I. Prompt submission of resolutions assures their inclusion in the Handbook and allows for their full consideration.

If you have questions regarding resolution submission, contact Jo-Ellyn M. Ryall, M.D., Speaker, MSMA House of Delegates; James Wolfe, M.D., Vice Speaker; or MSMA Headquarters.

WANTED: COVER ART

If you haven't already noticed, take another look at this month's cover. *Missouri Medicine* prides itself on its beautiful covers, featuring the work of Missouri artists — some of whom are physicians like yourself. If you would like to see your work on our cover, send your 35mm slides to: *Missouri Medicine*, P.O. Box 1028, Jefferson City, MO 65102.

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AIR FORCE

PRESIDENT'S PAGE

by Gary A. Dyer, M.D.
MSMA President

Individuals can change AMA policy. And there's no better time than the present to get busy and work to make changes for the good of medicine.

AMA Policy: You Can Shape It

In 1990, I was converted. I became a true believer. Individual physicians **can** change or shape AMA policy. I must confess that for many years my vague mental imprint of AMA policy making was something remote, changing at glacier speed, and controlled by big wigs. Rural Missouri physicians, in that mental picture, stood little chance of changing AMA policy in comparison with physicians from New York, Texas, or California. That view did not really change until 1989. Then, as president-elect of MSMA, I attended an AMA meeting for the first time. As part of the Missouri delegation, I closely scrutinized AMA House of Delegates activities. I was pleasantly surprised to find that every effort was made to allow all voices to be heard in reference committees. On the floor of the House, delegates had the opportunity to thoroughly debate issues. Men and women of varying ages made up the House and no age group, specialty, or special interest group dominated deliberations.

My complete conversion occurred after following a resolution through the Federation to AMA level and watching it become official policy of the AMA. That resolution, Patient and Physician Right to Privately Contract for Health Care, was conceived and written in rural Missouri. Existing AMA policy on the subject, enacted at the Interim 1989 AMA meeting, was thought to be narrow in scope, not applicable to all physicians, and in need of reshaping. The resolution presented was reviewed, discussed, and endorsed by the local component medical society. It was then forwarded to MSMA. Passing unanimously at the MSMA 1990 annual session (See Resolution #31 on the following page), it became one of eight MSMA resolutions taken to the 1990 AMA annual session. At AMA level, two resolutions dealing with the subject were discussed together in reference committee. I had the opportunity to introduce our resolution and testify in its behalf. One resolved from the second resolution was added to ours by the reference committee and adoption recommended. On the floor of the House, the resolution was further strengthened by amendment, and passed. Substitute Resolution #20, as amended, became the official policy of AMA on the subject of patient and physician right to privately contract for health care (See AMA Substitute Resolution #20 on the following page). It will remain AMA policy until another physician demonstrates the need for further reshaping or change.

You too can shape AMA policy. Any member can. Is there some portion of AMA policy flatly wrong, incomplete or poorly stated? Is the AMA mute on an issue of importance to you and likely important to all physicians? Don't just sit there and badmouth the AMA. Do the *write* thing! Carefully craft a resolution directed at the AMA and start it through the Federation. Here are some tips to guide your efforts:

1. **Define the Issue.** Single issue resolutions work best. Clearly define the issue, focusing your resolution on that subject.

2. **Review AMA Policy.** In 1990 the AMA published its policies in compendium form for the first time.[1] This volume as well as the actions of the AMA House of

continued on page 16

President's Page

continued from page 15

Delegates for the past two sessions should be reviewed to be sure your idea is not current AMA policy. Should you need assistance, the actions of the last two AMA sessions can be obtained from MSMA headquarters.

3. **Prepare Resolution in Proper Form.** Your resolution should be constructed in official format with "Whereases" and "Resolves." A preamble may take the place of whereases. Remember, only resolves are voted on in the MSMA and AMA Houses, and only adopted resolves become official policy.

4. **Seek Component Society Endorsement.** Present your resolution to your component society membership for review and endorsement. Here you quickly find out the merits of your proposal.

5. **Make it MSMA Business.** Submit your endorsed resolution to MSMA before the February 18, 1991 deadline. MSMA will ensure the resolution is in proper form and include it in the handbook mailed to all delegates. Remember, late resolutions are not easily made business of the House.

6. **Educate Reference Committee.** Attend the MSMA annual session at the Crown Center in Kansas City. Introduce your resolution at reference committee and testify in its behalf. Your resolution has the best chance for passage if you show vigorous support.

7. **Assist Rewrite for AMA.** After your resolution passes the MSMA House of Delegates, be prepared to help rewrite it for submission to the AMA at the June 1991 annual session.

References

1. *AMA Policy Compendium.* American Medical Association. 1990 Ed.

MSMA Resolution #31

Patient and Physician Right to Privately Contract for Health Care (A-90)

Resolved, That the official position of MSMA is: Any patient, regardless of health care insurance coverage (including Medicare and Medicaid), always has the basic right to privately contract with a physician for wanted or needed health care services, and to personally pay for those services when they are not covered or are deemed unnecessary by the health care plan. Neither the patient nor the physician should be harassed, penalized, or otherwise obstructed by the health care plan or the government from exercising this basic right; and be it further

Resolved, That this resolution be taken to AMA(A-90) with the intent of making the MSMA position the AMA position; and be it further

Resolved, That MSMA urge AMA to pursue all legislative and legal means to permanently preserve the patient's basic right to privately contract with physicians for wanted or needed health care services, and to reverse any limitations imposed by HCFA or other insurance or health care plans.

AMA Substitute Resolution #20 (Adopted in Lieu of Resolutions #20 and #181)

Patient and Physician Right to Privately Contract For Health Care (A-90)

Resolved, That the American Medical Association adopt the position that any patient, regardless of health care insurance coverage, has both the right to privately contract with a physician for wanted or needed health services and to personally pay for those services; and be it further

Resolved, That the AMA pursue appropriate legislative and legal means to permanently preserve the patient's basic right to privately contract with physicians for wanted or needed health care services; and be it further

Resolved, That the AMA continue to expeditiously pursue regulatory or legislative changes that will allow physicians to treat Medicare patients outside current regulatory constraints that threaten the physician/patient relationship; and be it further

Resolved, That the AMA seek immediately suitable cases to reverse the limitations on patient and physician rights to contract privately that have been imposed by the Health Care Financing Administration or the private health insurance industry.

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To get a copy of the *Health Access America* proposal, please call our Member Service Center at 1-800-AMA-3211.

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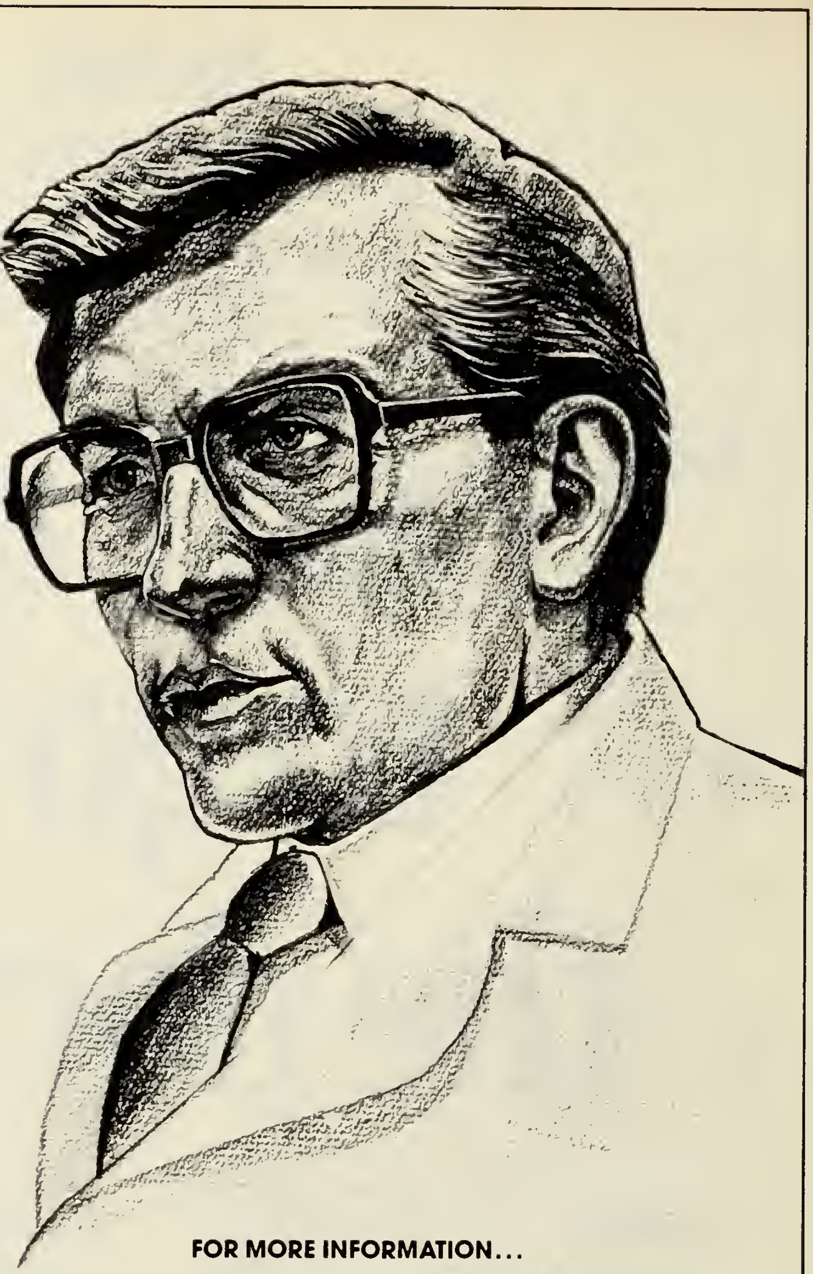

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PRACTICE MANAGEMENT

by Janice K. Woerth, Ph.D.

Do you have a question for Dr. Woerth? Include your questions along with your name, address and phone number and send them to:

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P.O. Box 1028
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Or call her direct:
816/587-1125

Although your name will not be used in the journal, please include your name and phone number so that Dr. Woerth may contact you if she needs additional information to answer your question.

Dear Dr. Woerth:

On occasion I must repeat a procedure on a patient. My staff tells me there is a problem with insurance paying for repeat procedures. Most often we are accused of double billing, then must write a letter to the insurance company explaining the need for repeating the procedure. This is time-consuming and certainly not cost-efficient. Any suggestions?

Dr. R.J.

Dear Dr.R.J.:

There is a solution. When completing the claim form, use CPT modifier -76, Repeat Procedure by Same Physician, after the CPT code you are repeating. This lets the insurance company know the procedure is being repeated. If it isn't obvious by the patient's diagnosis, include a brief note explaining why the procedure was repeated or, if billing electronically, include this information in the "comments" section.

There is also CPT modifier -76, Repeat Procedure by Another Physician, that may help. Again, include a brief explanation.

Note that modifiers serve three purposes: a) they modify the definition of a code, allowing the insurance company to better understand what has been done, b) they exclude the procedure from the physician's customary fee profile, and c) many modifiers are eliminated from the computer editing system and given individual consideration for payment by an insurance claims reviewer. I recommend physicians and staff become familiar with all the CPT modifiers found in Appendix A of the CPT book.

Dear Dr. Woerth:

I send almost all my lab work to an outside medical lab. They bill my patients for their services. Is there a code I can bill when I send out my lab work? What is it and how is it used?

Dr. W.Q.

Dear Dr. W.Q.:

The CPT code is 99000. It is found in the CPT book in the section titled, Special Services and Reports. The 99000 code is for "handling and/or conveyance of specimen for transfer from the physician's office to a laboratory." Nearly all insurance companies pay for this code. Medicare's reimbursement for this code is about $3. It will only be paid by Medicare one time per day per patient and, oddly enough, Medicare will not pay for the service if done in conjunction with a venipuncture, code 36415. However, under these circumstances, it should still be billed on the Medicare claim. It most often is denied as a non-covered service and is then the financial responsibility of the patient.

There is also a CPT code for "handling and/or conveyance of a specimen for transfer from the patient in other than a physician's office to a laboratory." This code, 99001, could be used, for example, when a specimen is taken at a nursing home. Finally, there is a CPT code, 99002, for "handling, conveyance, and/or any other service in connection with the implementation of an order involving devices (e.g., designing, fitting, packaging, handling, delivery or mailing) when devices such as orthotics, protectives, prosthetics are fabricated by an outside laboratory or shop but which items have been designed, and are to be fitted and adjusted by the attending physician."

All these codes allow the physician and/or office staff a means to be reimbursed for the time spent to prepare specimens or write orders for devices for outside labs. It is reasonable to expect patients or insurance companies to pay for these services. ■

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For Your Information:

Subtracting Cigarettes Without Adding Pounds

Many smokers report that the greatest hindrance to quitting smoking is their fear of gaining weight. Everyone knows someone who threw away the cigarettes and picked up 30 pounds. Although smokers see their habit as socially unacceptable, they see obesity in a worse light. Good interventional skills and awareness of one's own habits can prevent kicking the habit from become a "weighty" problem.

Not Everyone Gains Weight

Although it is true that smokers, on the average, do weigh less than nonsmokers, recent studies have shown that the average individual only gains 3-5 lbs after quitting smoking. By the same token, no additional cardiovascular risk is seen from obesity until the patient weighs more than 30% more than their ideal body weight. Although the health risks secondary to obesity are serious, far greater health risks are associated with cigarette smoking.

Causes Of Weight Gain

Weight gain following smoking cessation can be attributed in part to biological factors. For instance, smokers have increased production of thyroid hormone, and a basal energy expenditure 10% greater than that of nonsmokers. When these people stop smoking, their metabolism slows down slightly. In addition, smoking increases levels of natural hormonal appetite suppressants. This suppression is inhibited somewhat when smoking is stopped.

Although the biological factors should not be taken likely, they do not account for most of the weight gain problem that smokers may experience. The psychological and emotional aspects of cigarette addiction still remain the biggest problem. Patients overwhelmingly report that the need to place something in their hands and mouths invariably drives the craving for cigarettes. Unfortunately, they tend to relieve that craving with high-fat, high-sugar, high-calorie "quick-fix" snacks such as candies and pastries.

Get In Touch With Your Habits Before You Quit

In some ways, we are all slaves to our habits. Cigarette smoking becomes so entertwined with other habits that it is often difficult to separate the two. As one man aptly expressed, "I quit smoking six years ago — and to this day, after dinner, I still reach up and pat my shirt pocket like I'm reaching for a cigarette. Then I say to myself, 'Hey, I don't smoke anymore, what am I doing?' and put my hand back down — but no matter how hard I try not to, I still reach for the empty pocket now and then."

Experts in the field of smoking cessation recommend that smokers keep a "logbook" one to two weeks before quitting. Record for each cigarette smoked the date, time, place, activity engaged in, and the mood or reason for smoking it.

For Your Information — Subtracting Cigarettes Without Adding Pounds

At the end of this period, patterns or "triggers" should be evident — particular times, moods, or activities that spur the urge to smoke. By knowing and anticipating these triggers, smokers can take positive steps to keep these triggers from fueling the craving for cigarettes.

Common triggers for lighting up include sitting at the table following a meal, telephone calls, driving, working at a desk, coffee breaks, tension or stress, and being in the company of other smokers. Some strategies to avoid these triggers are listed below.

- Leave the table after a meal. Don't go to the usual "after-dinner smoking place" like the porch or the reclining chair.
- Keep a doodle pad by the phone and draw on it when talking.
- When the urge to pick up a cigarette hits, pick up a pen. Chew sugarless gum or carrot sticks to satisfy the oral craving for a cigarette.
- Leave the desk or take a walk if the urge gets too great, or breathe slowly and deeply, as if inhaling a cigarette.
- Use positive imagery. Think how proud others will be once you've quit, or think about what you'll buy with the money you used to spend on cigarettes.
- Exercise provides a double bonus — its obvious health benefits and distraction from cigarettes.

Anticipate withdrawal symptoms

Most of the symptoms associated with nicotine withdrawal (irritability, fatigue, insomnia, constipation, dizziness, and coughing) will start to occur within the first 48-72 hours and subside in seven to 10 days. Cravings for cigarettes are greatest during the first 10 days, peaking in the late afternoon. Luckily, though, recent studies reveal that these cravings are short-lived, lasting only 3-5 minutes. By anticipating these symptoms, smokers can thwart the urge to pick up a cigarette — or a candy bar.

Weight Control Pitfalls

Studies of smokers who have gained weight point out some common eating patterns that can cause added pounds:

1. Eating too quickly and too much. The faster you eat, the more you eat, because you aren't allowing your stomach to decide when it is full. Slow down, or put the fork down between bites. Give your tastebuds a chance to enjoy your food! Make a point of eating only at specified times and places.

2. Choosing high-calorie snacks. Bring low-calorie, high-fiber, low-fat snacks to work and avoid the vending machine, doughnut, and candy bar trap.

3. Eating and doing something else. Avoid eating while reading, watching TV, etc.

4. Eating when tired, bored, or depressed. Plan in advance what to do when food cravings hit. Keep food in cupboards and out of sight. Shop for food on a full stomach and stick to a shopping list.

5. Overeating at social occasions or family gatherings. Say "no thanks," politely when fattening treats get passed around. Enlist the help of family and friends. Remind loved ones to feel free to express their love and affection in ways other than offering goodies.

For more information about quitting smoking, call the National Cancer Institute toll free (1-800-422-6237) and ask for their pamphlet, *Quit for Good.*

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Fluoxetine (Prozac):

A Profile and Clinical Recommendations

Armando R. Favazza, M.D., M.P.H.
Columbia, Missouri

In this article, the author presents an overview of information known about the antidepressant drug, fluoxetine (Prozac).

Introduced in 1987, fluoxetine (Prozac) is one of those rare drugs to achieve a superstar status in a brief time. It already accounts for 20% of all antidepressant prescriptions and is well on its way to reaching annual sales of $1 billion. In cover articles, *Newsweek* called it a "wonder drug" and *New York* magazine pictured a bottle of Prozac with the caption "Bye-Bye, Blues." The drug has become so popular that it is not unusual for patients to ask for it by name.

However, an article describing the emergence of intense suicidal preoccupations in six patients treated with Prozac has spurred much interest.[1] Several $150 million lawsuits have been filed charging that Prozac has caused patients to self-mutilate, go on a shooting spree, and commit suicide. Media coverage of these lawsuits has been prominent.[2]

In light of the rapid, widespread use of Prozac and because of highly publicized safety concerns, this brief article reviews indications for the use of fluoxetine and makes recommendations to assist the primary care physician. Material for this article comes from the author's extensive clinical experience with the drug, from a review of the literature, and from interactions with primary care physicians.

What Is Fluoxetine?

Fluoxetine is an oral medication marketed as an antidepressant, although in the future it may be marketed also for weight reduction. It is chemically unrelated to all other available antidepressants. Each capsule contains 20 mg of active ingredient. It may be available soon in liquid form to facilitate use of smaller doses.

How Does Fluoxetine Work?

The primary mechanism by which fluoxetine exerts an antidepressant action is thought to be inhibition of the uptake of serotonin (a neurotransmitter) by neurons in the brain. The result is increased CNS serotonin levels. Evidence for this is based on indirect and peripheral measurements and on in vitro studies. Fluoxetine also increases CNS norepinephrine (another neurotransmitter) very slightly and probably has other effects on the CNS that are not yet understood. In fact, the role of neurotransmitters in the pathogenesis and pathophysiology of depression is unclear. A "chemical imbalance" may cause depression, may be a concomitant of depression, or may be a result of depression. Antidepressant medications (including fluoxetine) may work by stabilizing a depressive process or by helping a person to feel better while the process corrects itself.

For What Conditions Should Fluoxetine Be Prescribed?

The only indication for the use of fluoxetine is depression. Unfortunately, "depression" has a host of meanings that range from normal blues and bereavement to clinical conditions that may be mild or severe. Fluoxetine works best for patients with major depression, a condition characterized by a consistently depressed mood and markedly diminished interest or pleasure in most activities for at least two weeks; other important symptoms include significant weight loss or gain, insomnia or hypersomnia, agitation or marked "slowing down," loss of energy, feelings of worthlessness, inappropriate guilt, decreased concentration, indecisiveness, and suicidal thoughts or plans. When patients with major depression also have psychotic symptoms, such as hallucinations, delusions, or loosening of thought associations, then additional antipsychotic medication e.g. haloperidol, fluphenazine may be needed.

Dysthymia is a long-term, low-grade type of depression. Dysthymics tend to be unhappy, weepy, "sad sacks" who, despite their complaints, somehow manage to carry on with life. Fluoxetine is sometimes helpful for these patients. Another condition that may benefit from fluoxetine is the depression that may follow major stress, such as divorce, job loss, or rape. A final disorder, known as atypical depression, refers to conditions that do not meet all of the usual criteria for a depressive disorder. Fluoxetine may be tried with patients with atypical depression, but the diagnosis and treatment of such patients is best left to the psychiatrist.

Trials are underway for the use of fluoxetine in weight reduction. The drug is not yet approved for this indication and should not be used until approval is given and specific protocols are available. Fluoxetine is being prescribed by psychiatrists to control symptoms of impulsivity in certain patients with some measure of anecdotal success. This is not yet an approved indication.

How Effective Is Fluoxetine?

It is difficult to determine accurately the response to antidepressant medication because depressive disorders respond to placebo treatment about 30% of the time and because depression often remits spontaneously. Further, studies often comprise patient groups that are not strictly comparable, for example, differing criteria for depression are used. Most studies indicate, nonetheless, that about 65% to 80% of patients respond to imipramine and that all antidepressants are about equal in effectiveness to imipramine.[3] Thus, fluoxetine's therapeutic efficacy is no better or worse than that of other available antidepressants. A great many psychiatrists report anecdotally, however, that patients who have not responded to other medications get better with fluoxetine.[4,5] One author wrote, "The drug seems to give certain patients an energetic style of thinking and acting. . . . They are livelier, more optimistic, less vulnerable, more decisive than they were in their premorbid state."[6] Testimonials do not constitute scientific evidence, but in the case of fluoxetine they are quite widespread and would seem to indicate more than placebo responses or exuberant enthusiasm over a new drug. It is on the basis of these testimonials that the media have dubbed fluoxetine a "wonder drug."

What Are The Side Effects Of Fluoxetine?[3,7]

The overall side effect profile of fluoxetine is superior to that of other antidepressants. Like trazodone, it has very little anticholinergic activity. Thus, patients rarely complain of dry mouth, blurred vision, constipation, or urinary retention. It is probably the safest drug in regard to orthostatic hypotension and cardiovascular toxicity. The most common side effects of fluoxetine are insomnia, headaches, dizziness, nervousness, nausea, diarrhea, and sweating. Like other antidepressants, it can cause patients to become manic, especially with high doses.

How Safe Is Fluoxetine?

In cases of overdose, fluoxetine is safer than other antidepressants. The most common symptoms of an overdose are nausea and vomiting. Other symptoms include agitation, restlessness, hypomania, and (rarely) seizures. Only one death due to fluoxetine overdose has been reported, although several deaths have occurred when an overdose of fluoxetine is combined with other drugs and alcohol.

A recent study from Harvard Medical School described the emergence of obsessive, violent, intense suicidal thoughts in six patients.[1] However, two colleagues did a retrospective chart review of 1,017 depressed patients in treatment at Massachusetts General Hospital and found that the frequency of suicidality with fluoxetine given alone was not significantly different from the rate for fluoxetine in combination with tricyclic antidepressants, or for tricyclic antidepressants given alone or in combination with lithium.[8] Another study noted a reduction in suicidality in depressed patients treated with fluoxetine.[9] Suicidal thoughts are often found in depression and current data do not support a specific link between fluoxetine and suicidality.

Why Is Fluoxetine So Popular?

Fluoxetine is popular for five reasons. First, it is very easy to prescribe — one 20 mg capsule (the only size available) taken in the morning. In contrast, the doses of other antidepressants need to be adjusted, often fairly frequently. Second, it rarely causes weight gain (a significant problem for some depressed patients) and may cause weight reduction. Third, it is very difficult to commit suicide via an overdose. In contrast, the ingestion of a handful of lithium tablets and several handfuls of most other antidepressants can result in death. Fourth, it has a low overall rate of side effects. Fifth, the media have publicized the anecdotal reports of "wonder" responses to fluoxetine.

How Should Fluoxetine Be Prescribed?

Psychiatrists who have the expertise and time to monitor patients closely may decide to use a variety of antidepressant agents, since they all are about equally effective. However, fluoxetine is the drug of choice for non-psychiatric physicians because of its safety, low rate of side effects, and ease of use. The following guidelines may be helpful:

1. Fluoxetine should be used only for the treatment of depression. Best results occur in outpatients with major depression.
2. Prescribe only one capsule every morning (in geriatric patients the dose can be reduced to one capsule every other morning) for at least eight weeks.[10] Fluoxetine and its active metabolite have a mean terminal half-life of about nine days. Therefore, if the patient is still depressed after an eight-week trial, consider waiting two drug-free weeks before prescribing a different antidepressant (five weeks before prescribing a monoamine oxidase inhibitor) or refer to a psychiatrist.
3. Do not prescribe antianxiety agents or other antidepressants in conjunction with fluoxetine because their blood levels may increase significantly. Also, do not prescribe lithium because fluoxetine may cause an increase or a decrease in its blood level. Antipsychotic drugs appear to be safe, but if a patient is psychotic, consider referral to a psychiatrist.
4. Since fluoxetine binds tightly to plasma proteins, the blood levels of other drugs (such as digitalis and blood-thinning agents) may be affected adversely. Also, because fluoxetine is metabolized by the liver and excreted through the kidneys, less frequent administration (every other day) of the drug should be used in patients with liver or renal disease. Medications used to treat diabetes may need to be adjusted during and upon termination of fluoxetine treatment.
5. Patients receiving fluoxetine (or any antidepressant agent) should be seen weekly for at least 15 minutes during the first two months. Physicians should inquire about a patient's well-being in general and about suicidal thoughts in particular at each meeting. Patients who admit to intense suicidal preoccupations, to well-formulated suicidal plans, or to thoughts of violence toward others should be referred to a psychiatrist on an emergency basis.
6. Patients who respond well to fluoxetine should be kept on the drug for at least six to 12 months. After the first two months such patients can be seen every two to four weeks. A trend in psychiatry is to taper slowly almost all medications at the conclusion of therapy. The dose of fluoxetine cannot be lowered, but the frequency can be reduced to every other day and then to every third day for a few weeks.

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HIV/AIDS in Missouri:

An Assessment of Physician Attitudes and Practices

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Fewer than half of Missouri physicians responding to a statewide survey are willing to treat patients with HIV infection, and even fewer are willing to treat patients with AIDS. The authors discuss these survey results and their implications for patient care in Missouri.

The Centers for Disease Control (CDC) estimates that one million Americans are infected with the human immunodeficiency virus (HIV), the virus that causes AIDS.[1] More than 150,000 cases of AIDS have been confirmed nationwide and approximately 95,000 people have died.[2]

As of October 1990, there were 1,776 AIDS cases reported in Missouri, with 973 reported deaths. Approximately 72% of the cases are from Kansas City, St. Louis City, and St. Louis County, and more than 70% of those affected are under 40 years of age.[3]

This article examines a survey of physician attitudes regarding HIV and AIDS, and the willingness of Missouri physicians to test for HIV and to treat HIV or AIDS-challenged patients. The results will aid in developing education programs for physicians and other health professionals throughout the state.

Methods

The Missouri Department of Health's Bureau of AIDS Prevention conducted an anonymous survey of licensed physicians in Missouri. A stratified random sample was taken to reflect proportional representation of the major metropolitan areas (St. Louis City, St. Louis, Franklin, Jefferson, St. Charles, Jackson, Clay, Ray, Lafayette, and Cass counties), minor metropolitan areas (Boone, Buchanan, Christian, Greene, Jasper, and Newton counties), and non-metropolitan areas of the state. The four-page survey was mailed to 1,000 M.D.s and 400 D.O.s on June 1, 1989, with a repeat mailing on June 26, 1989. Seven hundred eleven (711) physicians returned a completed survey, giving a response rate of 50.8%.

The survey included five questions on the physician's practice profile, 11 questions on infection control practices, four questions on personal characteristics, three questions on continuing education preferences, and 17 questions on HIV and AIDS related practices and opinions.

The average (mean) age of survey respondents was 46 with the youngest being 25 and the oldest being 79. Eighty-two percent (82%) were male, 15% were female, and gender was not indicated by 3% of the respondents. Eighty-four percent (84%) of the respondents were White, 8% were Asian or Pacific Islander, 2% were Black or African American, 2% were Hispanic, and 4% did not indicate their race.

Practice specialty and setting were reported in the survey. For the purpose of this analysis, the respondents will be identified as practicing in one of five distinct practice areas:

1. *Principal provider*: Physicians likely to provide an initial assessment of an individual with non-

Table 1
Physician Attitudes and Practices Treatment of HIV/AIDS

	Number of Physicians	Willing to Treat HIV Patients (% Yes)	Willing to Treat AIDS Patients (% Yes)	Have Treated Patients with HIV (% Yes)	Have Treated Patients with AIDS (% Yes)
ALL PHYSICIANS	711	45	40	27	37
Practice Type:					
Principal Provider	406	38	33	19	30
Surgery	114	45	39	32	42
Specialist	76	54	51	42	60
Psychiatry	40	48	45	23	18
Other	66	48	50	35	47
Practice Experience:					
1-5 years	42	43	38	38	52
6-10 years	109	49	45	28	35
11-20 years	192	52	47	33	45
21-30 years	159	43	38	26	40
More than 30 years	167	32	27	14	19
Practice Location:					
Major Metro Area	471	43	39	30	42
Minor Metro Area	77	49	44	30	32
Non-Metro Area	136	40	34	11	20

specific signs or symptoms of HIV; or those likely to provide or be asked to provide routine HIV counseling and testing: general practice, family practice, internal medicine, emergency medicine, obstetrics/gynecology, pediatrics.

2. *Specialist*: Physicians likely to have persons with HIV illness referred to them for specialized care or procedures: the medical sub-specialties of cardiovascular and pulmonary medicine, ophthalmology, neurology, dermatology.

3. *Surgery*: Physicians likely to encounter persons with HIV illness in a surgical setting: anesthesiology, general surgery and surgical sub-specialties.

4. *Psychiatry*: Physicians likely to have persons with HIV illness referred to them for specialized care, or to care for clients in institutional settings where wide-scale testing is available; less likely to perform invasive procedures.

5. *Other*: Physicians in consultative services, less likely to perform routine counseling and testing or provide direct care for persons with or at risk for HIV: radiology, nuclear medicine, pathology.

Results and Discussion

Table 1 presents information related to physicians' willingness to treat persons with HIV-related illness and their actual experience in treating HIV infection or AIDS. In Missouri, 45% of all sampled physicians are willing to treat HIV-infected patients, although fewer (40%) are willing to treat patients with advanced illness, that is AIDS ($p=.05$). This willingness to treat persons with less-advanced illness was consistent across specialty type, range of experience and practice location, and may be related to the perceived level of clinical expertise necessary to care for persons with advanced HIV illness. For example, when analyzed by years of practice, those with 6-20 years of experience were most willing to treat HIV infection and AIDS, although physicians with 1-5 years in practice were more likely to have actually provided treatment (Table 1). Several respondents with fewer practice years indicated on the survey form that they had insufficient clinical experience and therefore were not willing to treat these patients.

Willingness to treat patients with HIV-related illness was significantly greater than actual experience in treatment. Twenty-seven percent (27%) of all respondents have knowingly treated at least one HIV-infected (presumably asymptomatic) patient and 37% have treated a patient with AIDS. Fewer than one third (30%) of physicians designated "principal providers" reported that they had treated a patient with AIDS, and fewer reported caring for an HIV-infected

Table 2
Patient Assessment, Counseling and Testing

	Number of Physicians	Provide Patients with HIV/AIDS Information (% Yes)	Routinely Assess for Risk of HIV (% Yes)	Provide HIV Testing (% Yes)	Provide HIV Counseling (% Yes)	Provide Both HIV Counseling & Testing (% Yes)	Has Ordered an HIV Test in the past year (% Yes)
ALL PHYSICIANS	711	59	49	57*	41	33	66
Practice Type:							
Principal Provider	406	67	55	73	55	47	80
Surgery	114	34	36	30	14	9	44
Specialist	76	53	41	55	28	26	61
Psychiatry	40	58	60	50	56	40	70
Other	66	36	23	23	3	3	11
Practice Experience:							
1-5 years	42	69	64	76	64	60	74
6-10 years	109	63	57	63	50	40	74
11-20 years	192	56	45	60	39	35	67
21-30 years	159	56	40	55	38	29	65
More than 30 years	167	57	44	47	34	26	56
Practice Location:							
Major Metro Area	471	55	48	52	39	31	61
Minor Metro Area	77	48	39	57	48	40	65
Non-Metro Area	136	63	47	71	45	40	75

* 17% refer to public health clinics

patient. Rizzo et al[4] have reported that nationwide, 43.4% of primary physicians have treated at least one person with HIV or AIDS.

Table 1 shows the differences in "willingness to treat" and actual treatment experience by practice type. More "surgeons" (42%) and "specialists" (60%) have actually treated persons with AIDS than have admitted a willingness to do so (39% and 51%, respectively). Many surgical respondents indicated a fear of occupational exposure to HIV.

Willingness to treat and HIV or AIDS practice experience also varied by practice location. Forty-two percent (42%) of responding physicians from Missouri's major metropolitan areas have treated at least one person with AIDS, compared to 20% of physicians practicing in rural Missouri ($p<.0001$). However, differences in willingness to treat HIV and AIDS were not so great when the two regions were compared, and physicians practicing in minor metropolitan areas actually indicated the highest degree for willingness to treat HIV-related illness. Significantly more rural physicians indicated a willingness to treat HIV and AIDS than have actually done so (see Table 1).

Table 2 presents information on the experiences and practices of Missouri physicians in counseling and testing for HIV. Of all physicians responding to the survey, 59% provide patients with HIV and AIDS information, 49% routinely assess for risk of HIV infection, 33% provide both HIV counseling and testing, and 66% have ordered an HIV test in the past year.

Despite recommendations by the Centers for Disease Control[5] and the American Medical Association[6] that a sexual and drug abuse history sufficient to assess the risk of HIV infection should be a routine component of a medical history on all adult and adolescent patients, it is clear that this risk assessment is not routinely performed by physicians in Missouri. Slightly more than half (55%) of those physicians most likely to be approached for HIV testing ("principal providers") are routinely providing this service.

Also of note is the apparent lack of counseling that accompanies HIV testing in Missouri. Seventy-three percent (73%) of "principal providers" furnish HIV testing services for their patients and 80% report having ordered an HIV test in the past year. However, significantly fewer providers offer counseling to accompany the testing ($p<.0001$). State Law (Section 191.653 RSMo [Supp. 1988]) requires that counseling regarding the risk of HIV infection, method and meaning of HIV testing, and HIV infection prevention accompany all HIV testing in Missouri. These messages are to be conveyed before the blood specimen is obtained, and when the test results are given.

Seventy percent (70%) of responding psychiatrists reported ordering an HIV test in the past year. This may be related to this profession's affiliation with substance abuse programs and state mental health facilities.

Although the level of HIV infection in childbearing women remains fairly low in Missouri as a whole, HIV is readily transmitted perinatally. Therefore, all pregnant females have been targeted to receive an HIV infection risk assessment as a routine component of prenatal care. Eighty-six percent (86%) of respondents who noted that their specialty was obstetrics/gynecology reported ordering at least one HIV test in the past year.

Provision of HIV counseling and testing services also varied by duration of medical practice. Although physicians with fewer years in practice (1-5 years) frequently admitted feeling uncomfortable with their ability to care for persons with HIV or AIDS, it appears that these physicians are most likely to provide HIV counseling and testing services. Because much of Missouri's AIDS health care has been provided at tertiary care facilities, it would be expected that physicians who have recently left hospital-based training programs would be most familiar with testing for HIV.

Surprisingly, physicians with rural-based practices were generally more likely to offer HIV testing, consultation or both. Seventy-five percent (75%) of survey respondents with non-metropolitan practices, as compared to 61% practicing in major metropolitan areas indicate that they had ordered an HIV test in the past year (p=.001). When analyzed by practice type, "principal providers" practicing in non-metropolitan areas were also more likely than their counterparts in major metropolitan areas to have ordered an HIV test in the past year (83% versus 80%), although this difference was not significant.

This relatively high level of testing by principal providers in the non-metropolitan areas of Missouri can be contrasted with the low level at which these providers actually provide care for persons with HIV. Although 83% of these rural Missouri principal providers ordered HIV testing in the past year, only 38% indicated that they were willing to care for these patients should they be found to be positive, and only 8% of rural principal providers said they had cared for an HIV-infected person. There is concern that persons identified as HIV-infected are being referred to tertiary care centers in the metropolitan areas even though initial medical assessment and care could be competently performed by the testing physician.

Conclusion

Fewer than half of the physicians in Missouri responding to a survey of attitudes and practices related to the care of persons with HIV or AIDS indicated a willingness to treat them. Only 30% of "principal providers," composed mainly of primary care physicians, provided treatment for persons with AIDS, and only 19% noted that they had treated persons with asymptomatic HIV infection. This is lower than the 43.4% noted in a recent national survey. This level is consistent with Missouri's annual AIDS incidence rate, which is lower than the national mean.

Many respondents noted a reluctance to treat these patients due to lack of knowledge of and experience in HIV and AIDS treatment. Unfortunately, the number of persons with HIV-related illness continues to grow in Missouri. As the AIDS medical "experts" continue to carry the increasing caseload, virtually all primary care practitioners will need to provide at least initial care to persons with HIV infection. In addition, persons with HIV and AIDS will need invasive procedures that require the expertise of physicians and surgeons skilled in these procedures. The proportion of surgeons and medical sub-specialists willing to treat persons with HIV and AIDS needs to be increased.

It should be noted that the AMA has emphasized that physicians may not ethically refuse treatment of a condition within his or her realm of competence simply because of HIV infection.[7] In addition, state statute and federal regulation prohibit discrimination in public accommodation against persons with HIV infection.

In Missouri, medical license renewal requires documentation of continuing medical education. The Missouri Department of Health (DOH), the Midwest AIDS Training and Education Center (MATEC) and other centers of medical education clearly need to continue to make training programs in HIV and AIDS treatment available to physicians in Missouri. In addition, the DOH will need to continue to provide education on the physician's legal and ethical obligation to perform consultation in conjunction with HIV testing.

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Tuberculin Skin Testing: Interpretation and Management

Answers to Commonly Asked Questions

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In this report, the authors attempt to answer some of the more commonly asked questions regarding skin testing for tuberculosis and the use of preventive therapy.

The incidence of Mycobacterium tuberculosis infection (M-TB) in the United States has been steadily increasing since 1986.[1] Before that, the annual number of new cases had been decreasing progressively. The increase is due to two major factors: an increased incidence of M-TB in persons with the acquired immunodeficiency syndrome (AIDS), and an increase in the number of immigrants from parts of the world where the disease is prevalent.[1]

The tuberculin skin test has been a traditional method of identifying exposure to M-TB, and despite recent advances in the management of M-TB infection, no better method for the screening of M-TB is available. Because the tuberculin skin test is neither 100% sensitive nor specific,[2] there continues to be considerable confusion over the interpretation of the test and the management of patients with a "positive" skin test.

Recent reports for the Centers for Disease Control (CDC) and the Advisory Committee for Elimination of Tuberculosis (ACET) have recommended changes in the methods for screening and preventing tuberculosis infection.[3] With the goal of eliminating tuberculosis infection in this country by the year 2010, these agencies feel changes are necessary.

We attempt to answer some of the more commonly asked questions regarding skin testing for tuberculosis and the use of preventive therapy.

Discussion

Question: Which tuberculin skin test should be used?

Answer: Two preparations of tuberculin are currently licensed for use in the United States: Old Tuberculin (OT) and Purified Protein Derivative (PPD).

The OT preparation is obtained from a concentrated broth of tubercle bacilli, while PPD is a precipitate obtained from filtrates of OT. Florence Siebert coined the term "purified protein derivative" in 1934 for the product she obtained from OT. A large batch was produced in 1939, Lot 49608, and was designated PPD-S. This has become the U.S. reference standard for all tuberculins.[2]

The standard 5 tuberculin unit (TU) dose is defined as the delayed skin test activity contained in 0.1 g/0.1 mL dose of PPD-S. It is also called "intermediate strength" PPD. The volar surface of the forearm is the site usually used for the testing, but any other accessible area may be used.

First strength PPD is 1 TU and has not been standardized. Second strength PPD (250 TU), on the other hand, is so potent that significant cross reactivity with clinically insignificant, non-tuberculous mycobacterium infections occurs frequently.

Other available techniques, such as the Tine test,

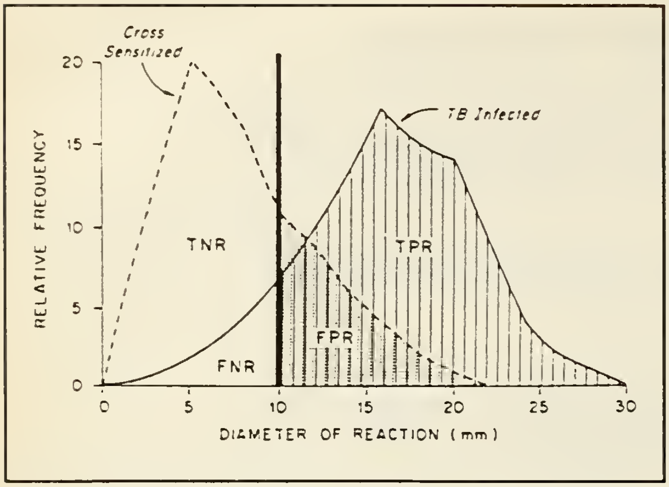

Fig. 1. Frequency distributions of induration with 5 U PPD in two populations: Persons sensitized to atypical mycobacteria (dashed line) and persons infected with *M. tuberculosis* (solid line). The areas enclosed by the two curves are equal. (Reproduced with permission, Gottleib JE, Pauker SG: *Semin Respir Med* 1989;10:3:218-226.)

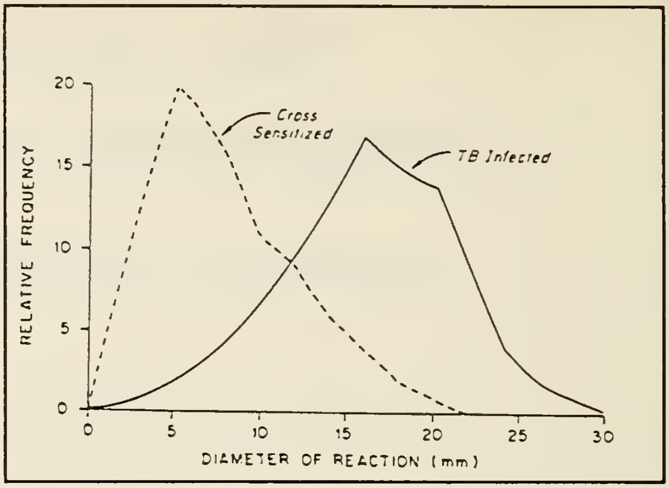

Fig. 2. Frequency distributions in Figure 1 divided into areas according to a "cutoff" of 10mm. TNR: true-negative rate; FNR: false-negative rate; TPR: true-positive rate; FPR: false-positive rate. (Reproduced with permission, Gottleib JE, Pauker SG: *Semin Respir Med* 1989;10:3:218-226.)

are not standardized and do not deliver a precise amount of tuberculin, but can be useful in mass screening programs. Patients who are identified as being reactors should be tested with the Mantoux test.

The Mantoux test (intracutaneous injection of 0.1 mL of PPD) is the standard against which all other available techniques are judged. For diagnostic evaluations the Mantoux technique should always be used.

Question: When should a PPD skin test be read?

Answer: The reaction to intradermally injected tuberculin is a classic delayed hypersensitivity reaction. Characteristically, reactions to tuberculin begin after 5-6 hours, reach a peak at 48-72 hours, and subside over several days. In a few subjects, such as the elderly or those being tested for the first time, reacations can develop slowly and may not peak until after 72 hours. Whenever possible, the test should be read at 48 hours, but for patients who miss the second appointment, a positive reaction may still be measurable one week later.

Immediate hypersensitivity reactions to tuberculin or constituents of the diluent can also occur. These reactions begin shortly after the injection, disappear within 24 hours and are not likely to be confused with the delayed hypersensitivity reaction.[2]

Question: Is there any risk to the patient in performing a tuberculin skin test?

Answer: Untoward reactions to PPD are very uncommon and are usually in patients highly sensitive to tuberculin. Allergic reactions to the buffer, Tween-80, have not been documented after the use of millions of doses. The tuberculin skin test itself does not induce delayed hypersensitivity. A few exquisitely sensitive subjects may respond to skin testing with vesicular or ulcerative local reactions, lymphangitis, regional adenopathy and fever. Treatment of local reactions should include use of a topical steroid cream and a dry dressing to prevent secondary infection. Aspirin may be useful for fever.

Much as one would like to avoid such reactions, their occasional occurrence does not warrant the use of a 1 TU preliminary test in patients suspected of having M-TB. As stated before, the 1 TU test has not been adequately standardized to allow for accurate interpretation.[2]

Question: What constitutes a "significant" reaction to the Mantoux skin test?

Answer: The terms "significant" and "non-significant" have replaced "positive" and "negative" in describing the results of the tuberculin skin test. This is because interpretation of the response to the PPD is also dependent upon clinical data.

Subjects with significant reactions to tuberculin are called "reactors," but not all reactors are infected with the tubercle bacilli. It has become apparent that a greater proportion of skin reactions to PPD result from a subclinical infection with atypical mycobacteria and not *M. tuberculosis*.

Interpretation of the skin test for M-TB has evolved over the decades. The criteria have changed

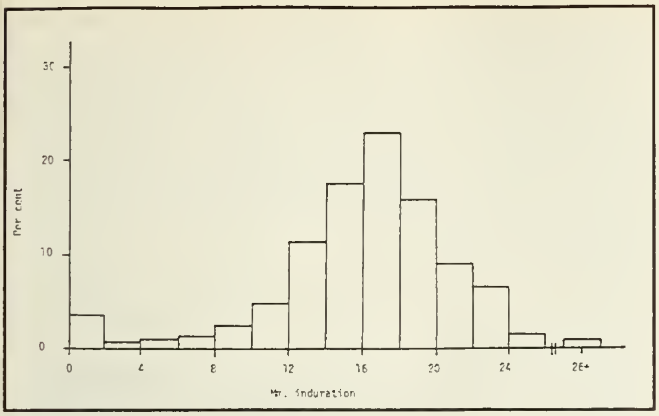

Fig. 3. Frequency distribution of reactions to 5 TU PPD-S among patients with positive cultures for *M. tuberculosis*. (Reproduced with permission, Palmer, et al: *J Pediatr* 1959;55:413-429.)

from Mantoux's 1910 "erythema and induration the size of a two-franc coin" to the present-day scheme based around a 10mm cutoff. Traditionally, with the use of standard strength PPD, a 10mm area of induration around the injection site has been considered to be significant. Due to a high proportion of non-tuberculous mycobacterium infections, any single cutoff criterion will result in some errors in the classification of significant and non-significant reactions.[4]

Regardless of the cutoff chosen, there will be some overlap (Figs 1 and 2). Using a 10mm cutoff, a certain number of reactions to atypical mycobacteria will be misclassified as significant (false positive rate), and some cases of true tuberculous infections will be classified as non-reactive.[4]

The interpretation of a tuberculin skin test should be influenced by the purpose for which the test was given and by the consequences of false classification. In patients known to be infected with M-TB, the distribution of reaction sizes resulting from administration of 5 TU of PPD are shown in Figure 3.[5] Clearly, a 16mm "cutoff" would significantly increase specificity, but would be at the expense of sensitivity.

In areas where non-tuberculous mycobacterial organisms are rare (i.e. Alaska) an induration diameter of 5mm or more should be considered to be significant.[3] In such patients reactions from infections with M-TB are likely to be more common than are cross-reactions from atypical organisms. Using a 5mm cutoff, very few patients infected with M-TB will be classified as having non-significant reactions.[2,3]

The recommended classification to be used is summarized in Table 1.

Question: What are the causes of a false-negative or false-positive Mantoux skin test?

Table 1
Significant Response to Tuberculin Skin Testing
With the Mantoux Test

Group I: A reaction of 5mm or more is considered significant in the following patients:
- a. Those with HIV infection.
- b. Those with close recent contact with a patient with infectious tuberculosis.
- c. Those who have chest roentgenograph with fibrotic lesions likely to represent old healed tuberculosis.

Group II: A reaction of 10mm or more is considered significant in the following patients:
- a. Patients with medical risk factors that are known to increase the risk of tuberculosis once infection has occurred.
- b. Foreign-born patients from countries with a high prevalence for tuberculosis infection.
- c. Medically underserved, low income populations and high risk minority groups (Blacks, Hispanics, Alaska Natives, and American Indians).
- d. Alcoholics and intravenous drug abusers.
- e. Residents and staff of long-term care facilities, such as prisons and nursing homes.
- f. Persons in settings where disease would pose a hazard to a large number of susceptible persons such as newborn nurseries, health care facilities, and shelters for the homeless.
- g. Other populations that have been identified locally as having an increased prevalence of tuberculosis.

Group III: A reaction of 15mm or more is considered significant in the following patients:
- a. All other persons not covered in Group I or II.

(Adapted, with permission, from: Screening for tuberculosis and tuberculosis infection in high risk populations and The use of preventative therapy for tuberculosis infections in the United States. *MMWR* 1990;39/No RR-8:1-12.)

Answer: The absence of a reaction to PPD does not exclude the diagnosis of tuberculosis.[3] Such cell-mediated responses may decrease, or disappear temporarily, as a result of a number of conditions (Table 2). In patients who do not react to tuberculin, an assessment of intactness of the delayed hypersensitivity reaction mechanism (anergy) should be evaluated by skin testing with one or more antigens to which almost all persons have been sensitized, such as mumps and Candida.

Table 2
Potential Causes of a Falsely "Non-Significant" Tuberculin Skin Test

Factors Related to the Person Being Tested
- Infections
  - viral (measles, mumps, chickenpox)
  - bacterial (typhoid fever, brucellosis, typhus, leprosy, pertussis, overwhelming tuberculosis, tuberculous pleurisy)
  - fungal (South American blastomycosis)
- Live virus vaccinations (measles, mumps, polio)
- Metabolic derangements (chronic renal failure)
- Nutritional factors (severe protein depletion)
- Diseases affecting lymphoid organs (Hodgkin's disease, lymphoma, chronic lymphcytic leukemia, sarcoidosis)
- Drugs (corticosteroids and many other immunosuppressive agents)
- Age (newborns, elderly patients with "waned" sensitivity)
- Recent or overwhelming infection with *M. tuberculosis*
- Stress (surgery, burns, mental illness, graft versus host reactions)

Factors Related to the Tuberculin Used
- Improper storage (exposure to light and heat)
- Improper dilutions
- Chemical denaturation
- Contamination
- Absorption (partially controlled by adding Tween-80)

Factors Related to the Method of Administration
- Injection of too little antigen
- Delayed administration after drawing into syringe
- Injection too deep

Factors Related to Reading the Test and Recording Results
- Inexperienced reader
- Conscious or unconscious bias
- Error in recording

(Reproduced with permission from: The American Thoracic Society: The tuberculin skin test 1981. *Am Rev Respir Dis* 1981;124:356-363.)

Table 3
Potential Causes of A Falsely "Significant" Tuberculin Skin Test

- Naturally occurring infection with nontuberculous mycobacteria.

- Previous inoculation with Bacille Calmette-Guerin (BCG) vaccination.

- Selection of an inappropriate "cutoff" for PPD skin testing.

The causes of a false-positive skin test are summarized in Table 3.

What is the significance of a particular skin test? The clinician often does not know whether a given patient is infected or cross-sensitized, and therefore the test evaluation must often be made on clinical grounds, after considering the patient's history and pertinent risk factors.

Question: How long does a patient remain tuberculin skin test positive?
Answer: As previously discussed, the development of factors which inhibit the cellular humoral response to tuberculins can decrease skin test reactivity. Although skin test reactivity usually wanes in the elderly, this decline has been demonstrated in all age groups. Katz et al[6] tested approximately 25,000 persons, children and adults, yearly for four years. Although the testing involved use of the Tine PPD technique rather than the Mantoux, it was found that individual tuberculin sensitivity varied from one year to the next. Of those with a positive reaction, 10% reverted to non-reactivity the following year. Varying stages of reactivity were noted in all age groups and this yearly variability was the rule rather than the exception.

After reviewing 776 culture-positive patients, Battershill[7] suggested that the fully developed cutaneous reaction to tuberculin is an "all or nothing" phenomenon and that there is no gradual decrease in reactivity.

The length of time, therefore, that a patient remains positive to a tuberculin skin test is variable.

Question: Is there any reason to repeat tuberculin skin testing in patients known to be positive?
Answer: If a patient has a documented history of a significant tuberculin reaction, there is little indication for retesting. It has been shown, however, that the skin test in patients who are adequately treated within six months of infection may revert to non-significant.[8] If this reversion is known to have occurred, a subsequent significant PPD may indicate reinfection with M-TB.

Question: What is the "Booster" Phenomenon?
Answer: Repeated testing of uninfected subjects with PPD does not sensitize them to tuberculin. However, delayed hypersensitivity to tuberculin once it has been established by mycobacterial infection or vaccination, may gradually wane over time. After a long period of time, an initial test may not induce a significant reaction. However, the stimulus of this test may "boost" the result of a second skin test admini-

stered within a short period of time.[9-11] This has been shown to occur as early as one week after the initial stimulating test and can persist for a year or longer.[2] This increase in reaction can be falsely interpreted as a recent conversion. This phenomenon can be seen at any age, but is more likely in the older age groups.

To avoid this problem, especially in the geriatric age group, a two-stage test should be performed. If the reaction to the first test is less than 10mm of induration, a second test should be given one week later. If this test is also less than 10mm of induration, then the individual is considered to be non-reactive.[12] However, a test result greater than 10mm would indicate a "boosted reaction."[12]

Question: How do you define recent in the term "recent converter?"
Answer: Skin test conversion is defined as an increase of 6mm or more in reaction size, from less than 10mm to greater than 10mm with the same strength of antigen within 24 months. The increase in 6mm was chosen because of the known variability in reaction and measurement. A time period of 24 months is used because the newly infected are at greatest risk of developing disease in this period.[12]

Question: If a patient has had a BCG vaccination in the past, is there any value to performing a tuberculin skin test?
Answer: The degree of immunity to tuberculosis infection following BCG vaccination is highly variable. The conversion rate is less than 100%, and the mean reaction size is often less than 10mm. Tuberculin sensitivity is known to wane after vaccination, and it is therefore prudent to consider significant reactions in BCG-vaccinated persons as indicative of infection with M-TB.[13]

Question: Who should be considered for tuberculin skin testing?
Answer: The Advisory Committee for the Elimination of Tuberculosis (ACET) rcommends that certain high-risk groups be screened for tuberculosis and tuberculous infection. They are summarized in Table 4.[3]

Question: Who should be given isoniazid (INH) preventative therapy?
Answer: Patients who are candidates for INH preventative therapy are shown in Table 5.

Patients should receive 5mg/kg of INH per day up to a total of 300 mg/day. A daily dose of 50 mg of pyridoxine will minimize the risk of development of INH-induced peripheral neuropathy. Duration of therapy should be at least 24 weeks in all patients, and up to 52 weeks in those with radiographic abnormalities.[13]

Table 4
Groups at High Risk for the Development of Tuberculosis or Tuberculous Infection

High-Risk Factors

1. Persons infected with the human immunodeficiency virus (HIV).
2. Close contacts of persons known or suspected to have tuberculosis, sharing the same households or other enclosed environments.
3. Persons with medical risk factors known to increase the risk of disease if infection has occurred. These medical risk factors include:
    Silicosis
    Gastrectomy & jejunal bypass surgery
    Weight of 10% or more below ideal body weight
    Chronic renal failure
    Diabetes mellitus
    Conditions requiring prolonged high dose corticosteroid therapy
    Immunosuppressive therapy
    Hematologic disorders (e.g. leukemia and lymphomas)
    Other malignancies (e.g. gastric carcinoma)
    Abnormal chest radiograph that shows fibrotic lesions consistent with old healed tuberculosis

High-Incidence Group

1. Foreign-born persons from countries with high TB prevalence.
2. Medically underserved low-income populations, including high-risk racial or ethnic minority populations (e.g. Blacks, Hispanics and Native Americans).
3. Alcoholics and intravenous drug users.
4. Residents of long-term-care facilities, correctional institutions, mental institutions, nursing homes/facilities, and other long-term residential facilities.

(Adapted, with permission, from: Screening for tuberculosis and tuberculous infection in high risk populations and The use of preventative therapy for tuberculosis infections in the United States. *MMWR* 1990;39/No RR-8:1-12.)

Question: How do you treat a pregnant woman who is found to have a significant tuberculin skin test?
Answer: Untreated tuberculosis represents a far greater hazard to a pregnant woman and her fetus than does treatment of the disease.[14,15] If infection with tuberculosis is suspected, the evaluation should be carried out in the same manner as with any other patient. A history and physical should be performed to find signs and symptoms of active disease, and a chest radiograph obtained in a search for abnormalities compatible with M-TB infection.

If there is no evidence of active disease, the decision to use INH preventative therapy should be made

Table 5
Criteria for Determining the Need for Preventative Therapy for Patients with a Significant* Tuberculin Skin Test

	Age Group (Years)	
Category	<35	>35
With Risk Factor¶	Treat all age groups if Mantoux test is significant.*	
No Risk Factor High-incidence group§	Treat if PPD> 10mm	Do not treat
No Risk Factor Low-incidence group	Treat if PPD > 15mm	Do not treat

*Significant response to tuberculin skin testing defined in Table 1.
¶Risk Factors defined in Table 4.
§High-incidence group defined in Table 4.

(Adapted, with permission, from: Screening for tuberculosis and tuberculous infection in high risk populations and The use of preventative therapy for tuberculous infections in the United States. *MMWR* 1990;39/No RR-8:1-12.)

using the same criteria as with other patients, but should not be started until after delivery.[13] In patients known to be recently infected, INH should be started after the first trimester; however, evidence of active infection mandates effective treatment. The initial treatment regimen should consist of isoniazid and rifampin. A third drug, ethambutol, should be added in cases of suspected resistance.

Isoniazid, rifampin and ethambutol all cross the placental barrier, but these drugs have not been demonstrated to have teratogenic effects. Pyridoxine is recommended for pregnant women taking isoniazid. The routine use of pyrazinamide is precluded by inadequate teratogenic data. Streptomycin is the only antituberculous drug documented to have harmful effects on the fetus, but toxic potential is presumably shared by kanamycin and capreomycin. There is insufficient information on the effects of cycloserine and ethionamide and they should be avoided.[13]

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Primary Amyloidosis of the Lower Urinary Tract:

A Case Report

Vodur C. Reddy, M.D.
Joplin, Missouri

Primary amyloidosis of the lower urinary tract is a rare condition with an excellent prognosis in most cases. In this case, the author describes a case primarily involving the urinary bladder.

Amyloid deposits within the wall of the urinary bladder are rare. Their principal significance is their ability, clinically and cystoscopically, to mimic malignancy, and their capacity to cause life-threatening gross hematuria.

Most cases of vesical amyloidosis are of the localized type, with fewer cases of the secondary variety. Fifty-two cases of primary vesical amyloidosis have been reported,[1-5] and we describe one additional case here.

Case Report

A 74-year-old man had painless, gross hematuria of a couple days' duration. Results of a physical examination were normal. A complete blood count, measurement of sedimentation rate, and urine culture were normal. Intravenous pyelography revealed normal upper tracts with a large filling defect in the right lateral wall of the bladder (Fig 1). A clinical diagnosis of neoplasm of the urinary bladder was made. Upon cystoscopy, a large sessile, yellowish-looking tumor was resected. Several satellite lesions around the large tumor, which measured 1.5 cm, were also resected. Histological examination confirmed the presence of amyloid (Fig 2). Subsequent investigations for connective tissue disorders and myeloma were negative. Rectal biopsy was normal. Subsequent cystoscopy at regular intervals revealed no evidence of any amyloid deposits, except for slight irregularity of the mucosa at the previous resection site. The patient had no more episodes of hematuria.

Discussion

Amyloidosis has been reported in sites throughout the urinary tract. Amyloidosis of the urinary bladder may be of two varieties. The primary type basically affects the bladder without any systemic manifestations. The secondary variety is the result of longstanding inflammation and sometimes neoplasms. It is most commonly seen in people with chronic arthritis.

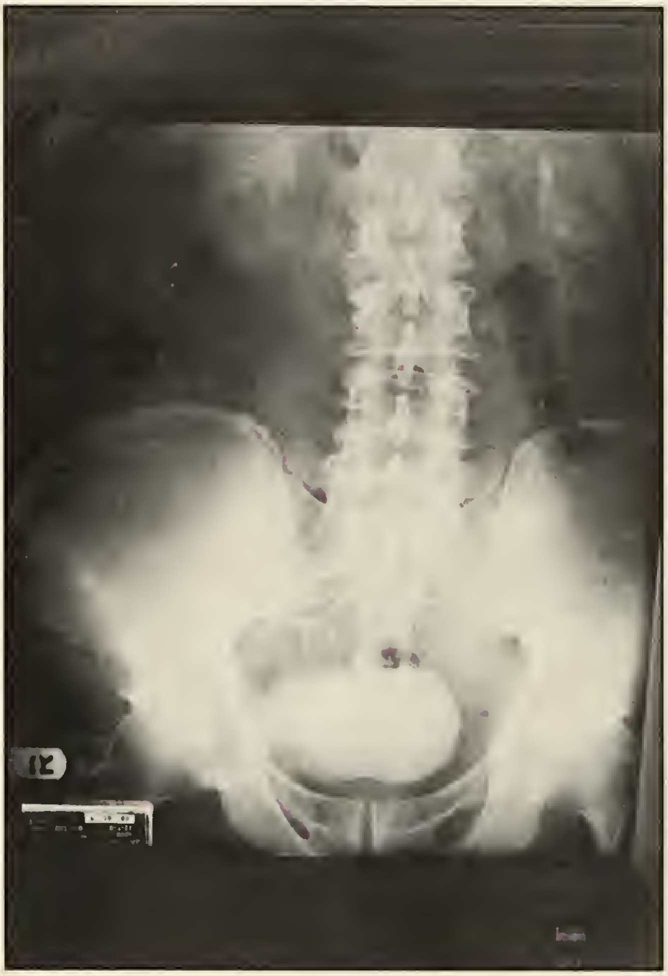

Fig. 1. Intraveneous pyelography (IVP) shows filling defect in the right lateral wall of the bladder.

The diagnosis of amyloidosis of the urinary bladder is impossible to make without biopsy and histological examination. The lateral wall is most commonly involved,[6] as in our patient.

Management of vesical amyloidosis is usually symptomatic. In persistent cases of hematuria, intravesical instillations of dimethyl sulfoxide (DMSO) can be successful. Colchicine can also be used. The usual dosage is 2 mg daily.[5]

In summary, amyloidosis is a rare condition of the lower urinary tract with an excellent prognosis in most cases.

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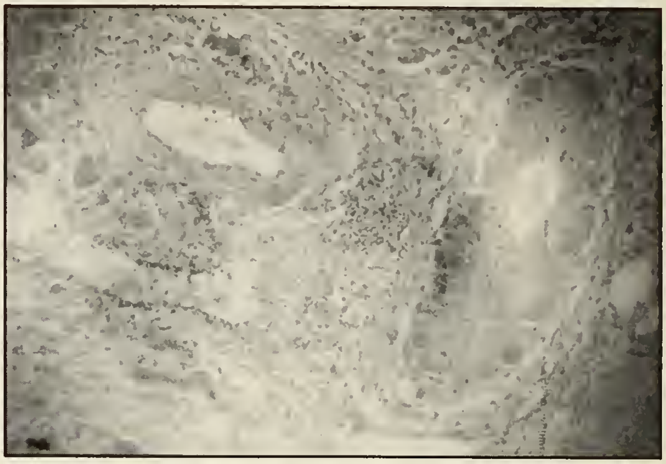

Fig. 2. Histology shows areas of Eosinophilic material, typical of amyloid.

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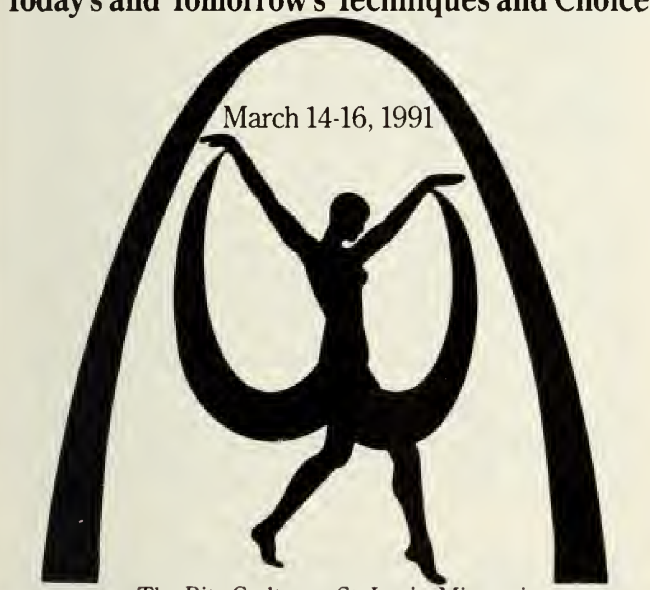

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PROGRAM

THURSDAY, MARCH 14, 1991

7:00 A.M.:	Registration
7:45 A.M.:	Welcome/S. Robert Kovac, M.D.
7:50 A.M.:	Stephen H. Cruikshank, M.D. (Scientific Moderator)
8:00 A.M.:	L. Russell Malinak, M.D. *"The Decline of Vaginal Hysterectomy"*
8:35 A.M.:	Sheldon A. Weinstein, M.D. *"Vaginal Hysterectomy and Oophorectomy"*
9:10 A.M.:	Javier F. Magrina, M.D. *"The Use of Self-retaining Retraction in Vaginal Surgery"*
9:45 A.M.:	Break
10:15 A.M.:	Richard J. Gimpelson, M.D. *"Operative Office Hysteroscopy"*
10:35 A.M.:	M. Leon Tancer, M.D. *"The Martius Operation"*
11:05 A.M.:	J. Andrew Fantl, M.D. *"Bladder Drainage in Pelvic Surgery"*
11:25 A.M.:	Lane J. Mercer, M.D. *"The Use of Antibiotics for Vaginal Surgery"*
Noon	Question and Answer Period
12:30 P.M.:	Lunch
1:30 P.M.:	Robert F. Porges, M.D. *"Vaginal Plastic Repair"*
2:05 P.M.:	Wayne F. Baden, M.D. *"Management of Anterior Vaginal Defects: Urethrocele, Anatomic Urinary Incontinence and Cystocele"*
2.40 P.M.:	M. Leon Tancer, M.D. *"Vaginal Hysterectomy the Suture Technique"*
3:10 P.M.:	Break
3:30 P.M.:	G. Rodney Meeks, M.D. *"Vaginal Hysterectomy in a Gynecologic Training Program"*
4:05 P.M.:	Round Table Moderators: S. Robert Kovac, M.D.—Stephen H. Cruikshank, M.D. *"Complications of Vaginal Surgery"* Javier F. Magrina, M.D. G. Rodney Meeks, M.D. M. Leon Tancer, M.D. Sheldon A. Weinstein, M.D. Robert F. Porges, M.D. L. Russell Malinak, M.D.
4.45 P.M.:	Question and Answer Period
5:15 P.M.:	Adjourn Wine and Cheese Reception/Exhibit Hall

FRIDAY, MARCH 15, 1991

7:30 A.M.:	Update/Stephen H. Cruikshank, M.D.
7:45 A.M.:	Wayne F. Baden, M.D. *"Is a Universal Language for Vaginal Relaxation Desirable? Possible? Available?"*
8:25 A.M.:	L. Russell Malinak, M.D. *"Laparoscopy and Vaginal Hysterectomy"*
9.00 A.M.:	S. Robert Kovac, M.D. *"Abdominal Hysterectomy for Fibroids—The Dying Art"*
9:45 A.M.:	Break
10:00 A.M.:	Stephen H. Cruikshank, M.D. *"Sacrospinous Fixation SHOULD it be done at the Time of Vaginal Hysterectomy?"*
10:35 A.M.:	John O. L. DeLancey, M.D. *"Functional Anatomy of the Pelvic Floor"*
11:05 A.M.:	Robert F. Porges, M.D. *"Management of Giant Enterocele"*
11.40 A.M.:	Question and Answer Period
Noon	Lunch
1:00 P.M.:	*"Joseph H. Pratt, M.D. Vaginal Surgeon's Award"* Presented by: S. Robert Kovac, M.D. Presented to: Joseph H. Pratt, M.D.
1.10 P.M.:	Javier F. Magrina, M.D. *"Vaginal Vault Repair—Mayo Culdoplasty"*
1.45 P.M.:	Richard J. Gimpelson, M.D. *"Hysteroscopic Myomectomy"*
2:05 P.M.:	Sheldon A. Weinstein, M.D. *"Vaginal Surgery Tricks"*
2:45 P.M.:	Lane J. Mercer, M.D. *"Treatment of Severe Prolapse with Colpocleisis"*
3:15 P.M.:	Break
3:45 P.M.:	G. Rodney Meeks, M.D. *"Vaginal Hysterectomy for Enlarged Uteri"*
4.20 P.M.:	Question and Answer Period
4:45 P.M.:	Adjourn
6:30 P.M.:	Social Dinner/Dance

SATURDAY, MARCH 16, 1991

7:30 A.M.:	Update/S. Robert Kovac, M.D.
7.40 A.M.:	Robert F. Porges, M.D. *"Anatomy and Physiology of Pelvic Support"*
8:00 A.M.:	J. Andrew Fantl, M.D. *"Lower Urinary Tract in Severe Prolapse"*
8:20 A.M.:	M. Leon Tancer, M.D. *"Vesicovaginal Fistula and Surgical Management of Operative Cystotomy"*
8:50 A.M.:	Lane J. Mercer, M.D. *"Diseases and Surgery of the Female Urethra"*
9:15 A.M.:	Break
9:30 A.M.:	John O. L. Delancey, M.D. *"Anatomy of Stress Incontinence and the Paravaginal Repair"*
10:05 A.M.:	Round Table Moderators: S. Robert Kovac, M.D.—Stephen H. Cruikshank, M.D. *"Who Should Manage Urinary Incontinence in Women?"* John O. L. DeLancey, M.D. Robert F. Porges, M.D. Lane J. Mercer, M.D. J. Andrew Fantl, M.D. Wayne F. Baden, M.D. M. Leon Tancer, M.D.
10:45 A.M.:	Question and Answer Period
11:00 A.M.	Adjourn

For registration or further information contact:

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January

5 - 10 **Rheumatology for the Practicing Physician** — Location: Keystone Resort, Colorado. Contact: Cathy Caruso, CME Office, Washington University School of Medicine, 660 S. Euclid, Box 8063, St. Louis, MO 63110. 1-800-325-9862 or 314/362-6893.

9 - 11 **Tips: Strengthening Instructional Skills in the Health Professions** — Location: St. Louis University School of Nursing, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

11 **Clinical Conferences in Otolaryngology/Head & Neck Surgery: Rhinoplasty** — Location: St. John's Mercy Medical Center, St. Louis, MO. Contact: St. Louis University CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712 or 314/577-8167.

14 **City-Wide Radiology Conference** — Location: St. Louis University, St. Louis, MO. Contact: R. Gilbert Jost, M.D., Director, Chief of Diagnostic Radiology, Mallinckrodt Institute of Radiology, 510 S. Kingshighway, St. Louis, MO 63110. 314/362-7130.

18 - 20 **Advanced Trauma Life Support Provider Course** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

February

1 **ACLS Recertification Course** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

1 **Prevention of Kidney Failure** — Location: Research Medical Center, Kansas City, MO. Contact: The Ed Bixby Institute for Postgraduate Medical Education, Research Medical Center, 2316 East Meyer Blvd., Kansas City, MO 64132. 1-800-892-5771, ext. 4306 or 816/276-4306.

6 - 8 **Peritoneal Dialysis Conference** — Location: Opryland Hotel, Nashville, TN. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

8 **Clinical Conferences in Otolaryngology/Head & Neck Surgery: Allergy and Otolaryngology: A Dynamic Interface** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712. or 314/577-8167.

8 - 10 **MAFP Young Physicians** — Location: Hilton Plaza Hotel, Kansas City, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212.

11 **5th Annual Daniel R. Biello Memorial Lecture** — Location: Mallinckrodt Institute of Radiology, St. Louis, MO. Contact: R. Gilbert Jost, Chief of Diagnostic Radiology, Mallinckrodt Institute of Radiology, 510 S. Kingshighway, St. Louis, MO 63110. 314/362-7130.

14 - 17 **Microsurgery of the Cerebellopontine Angle and Cranial Base** — Location: St. Louis University Medical Center, St. Louis MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

21 - 22 **Advanced Cardiac Life Support Course** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

21 - 24 **Rhinoplasty** — Location: To be announced. Contact: Cathy Caruso, CME Office, Washington University School of Medicine, 660 S. Euclid, Box 8063, St. Louis, MO 63110. 1-800-325-9862 or 314/362-6893.

March

1 - 3 **Group Relations Conference** — Location: University of Missouri, Columbia, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

4 - May 20 **17th Annual Internal Medicine Review (Monday Evenings) —** Location: Steinberg Amphitheater, The Jewish Hospital, St. Louis, MO. Contact: Cathy Caruso, CME Office, Washington University School of Medicine, 660 S. Euclid Ave., St. Louis, MO 63110. 314/362-6893 or 1-800-325-9862.

8 **Preceptor's Day —** Location: University of Missouri, Columbia, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

8 - 9 **4th Annual Contact Lens Course —** Location: Washington University Medical Center, St. Louis, MO. Contact: Cathy Caruso, Washington University School of Medicine, CME Office, 660 S. Euclid, Box 8063, St. Louis, MO 63110. 1-800-325-9862 or 314/362-6893.

8 - 9 **Advanced Trauma Life Support Provider Course —** Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

9 - 10 **Family Practice Update —** Location: University of Missouri, Columbia, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

11 **City-Wide Radiology Conference: Fundamental Observations in Chest Radiology —** Location: Mallinckrodt Institute of Radiology, St. Louis, MO. Contact: R. Gilbert Jost, M.D., Chief of Diagnostic Radiology, Mallinckrodt Institute of Radiology, 510 S. Kingshighway, St. Louis, MO 63110. 314/362-7130.

15 **Clinical Conferences in Otolaryngology/Head & Neck Surgery: Endoscopic Sinus Surgery —** Location: St. Joseph's Hospital, St. Charles, MO. Contact: St Louis University CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712 or 314/577-8167.

22 **Ninth Annual Symposium on Geriatric Medicine —** Location: Breckinridge Frontenac Inn, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

April

4 **In Vivo Magnetic Resonance Spectroscopy IV —** Location: The Ritz-Carlton, St. Louis, MO. Contact: Radiology Postgraduate Education, Room C-324, University of California School of Medicine, San Francisco, CA 94143. 415/476-5731.

4 - 5 **Critical Care Update —** Location: Holiday Inn Executive Center, Columbia, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

6 **Hypercholesterolemia: Practical Aspects to Patient Management —** Location: Hyatt Regency, Union Station, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

8 **Leroy Sante Lecture —** Location: St. Louis University, St. Louis, MO. Contact: R. Gilbert Jost, M.D., Chief of Diagnostic Radiology, Mallinckrodt Institute of Radiology, 510 S. Kingshighway, St. Louis, MO 63110. 314/362-7130.

10 - 13 **Treatment of Surgical Spine Disease —** Location: The Ritz-Carlton Hotel, St. Louis, MO. Contact: Cathy Caruso, CME Office, Washington University School of Medicine, 660 S. Euclid, Box 8063, St. Louis, MO 63110. 1-800-325-9862 or 314/362-6893.

12 - 13 **The 6th Dr. Robert K. Match Distinguished Scholar Program: Controversies In the Management of Breast Cancer —** Location: The Waldorf-Astoria, New York, N.Y. Contact: Ann J. Boehme, CMP, Associate Director of Continuing Education, Long Island Jewish Medical Center, New Hyde Park, NY 11042. 718/470-8650, or FAX: 516/352-4801.

12 - 14 **Annual Geriatric Psychiatry Conference: Recognition and Treatment of Problem Behaviors in Long Term Care —** Location: Tan-Tar-A Resort, Osage Beach, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63014. 1-800-553-2712.

13 **Electro Compulsive Therapy —** Location: Hyatt Regency-Union Station, St. Louis, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

18 - 21 **Advanced Microsurgery of the Lumbar & Cervical Spine —** Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

22 - May 3 **Institute For Clinical Health Care Ethics —** Location: St. Louis University, Margaret McCormick Doisy Learning Resources Center, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-533-2712.

25 - 26 **18th Annual Obstetrics and Gynecology Symposium —** Location: Washington University Medical Center, St. Louis, MO. Contact: Cathy Caruso, CME Office, Washington University School of Medicine, 660 S. Euclid, Box 8063, St. Louis, MO 63110.

May

31 - June 2 **A.K. Rice National Scientific Program** — Location: Ritz-Carlton Hotel, St. Louis, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

June

6 - 7 **Patent Development** — Location: Eldorado Hotel, Santa Fe, NM. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

7 **Ultrasound Perinatal Sonography** — Location: Adam's Mark Hotel, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand, St. Louis, MO 63104. 1-800-533-2712.

7 - 8 **Primary Pediatrics** — Location: University of Missouri, Columbia, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

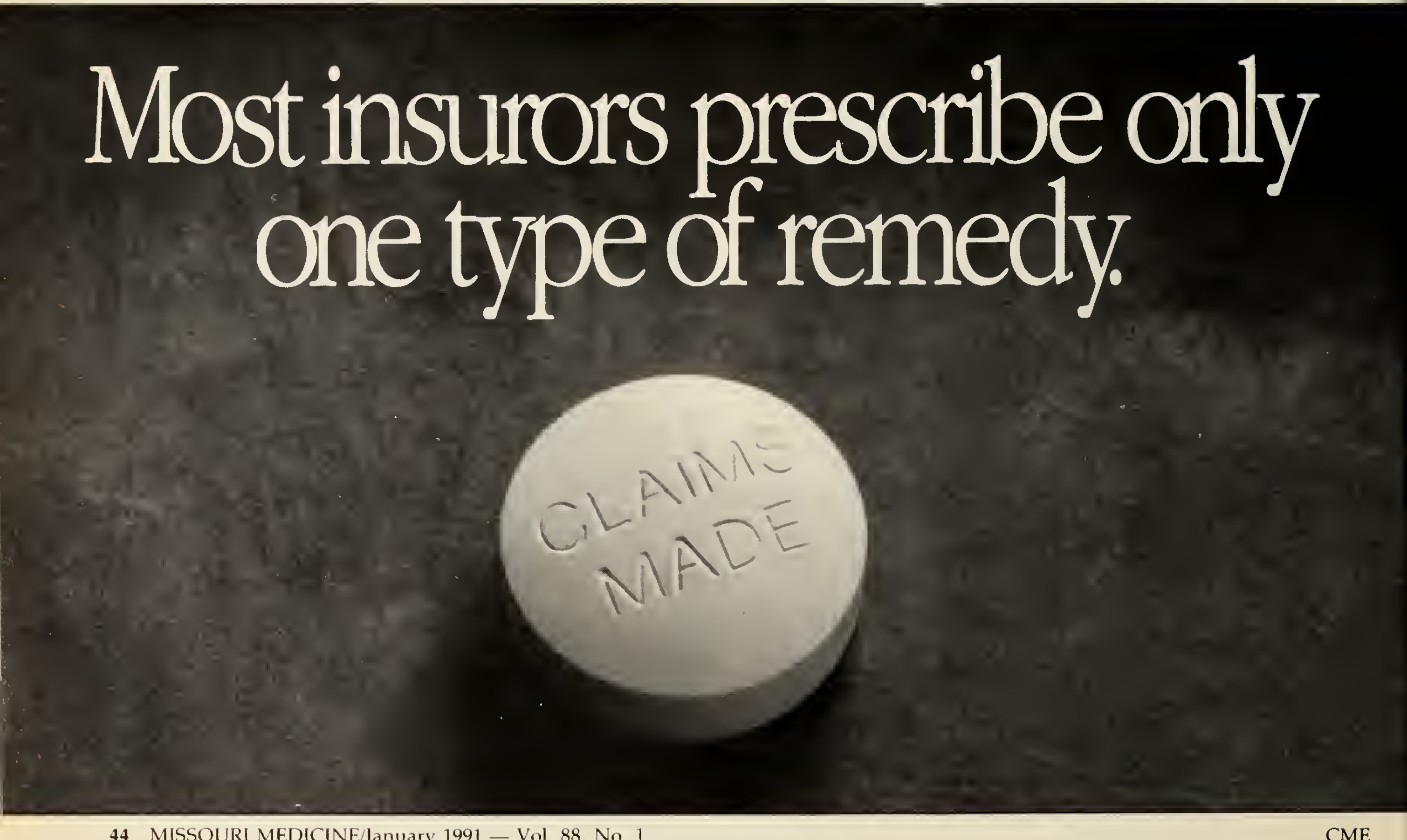
22 - 26 **Back to the Basics in the Tetons** — Location: Jackson Lake Lodge, Jackson, WY. Contact: Julie Potts/Anne Williamson, Missouri Postgraduate Course in Allergy, Inc., Suite A, 24-26 South Main Street, Liberty, MO 64068. 816/781-0902.

28 - 30 **Frontiers in Endosurgery (Urologists only)** — Location: Washington University Medical Center, St. Louis, MO. Contact: Cathy Caruso, CME Office, Washington University School of Medicine, 660 S. Euclid, Box 8063, St. Louis, MO 63110. 1-800-325-9862 or 314/362-6893.

July

20 - 27 **9th Annual Medical Seminar, Topics in Contemporary Medicine** — Location: Plummer's Great Slave Lake Lodge, Northwest Territories, Canada. Contact: Joseph F. Bocklage, M.D., 103 Oakdale Medical Center, 3366 Oakdale Avenue North, Minneapolis, MN 55422. 612/588-9478.

26 **ACLS Recertification Course** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand, St. Louis, MO 63104. 1-800-533-2712.



April

30 - May 2 **Molecular Basis of Bone Cell Physiology: Transcellular Signaling** — Location: The Sheraton West Port Inn, St. Louis, MO. Contact: Cathy Caruso, CME Office, Washington University School of Medicine, 660 S. Euclid, Box 8063, St. Louis, MO 63110. 1-800-325-9862 or 314/362-6893.

May

1 - 3 **Protection for Research Risk** — Location: The Hyatt Regency, Union Station, St. Louis, MO. Contact: Cathy Caruso, CME Office, Washington University School of Medicine, 660 S. Euclid, Box 8063, St. Louis, MO 63110. 1-800-325-9862 or 314/362-6893.

3 - 5 **OR Legal Environment: Medicine Response** — Location: Don CeSar Beach Resort, St. Petersburg, FL. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-533-2712.

10 - 11 **Allergy For the Clinician** — Location: Ritz Carlton Hotel, St. Louis, MO. Contact: St. Louis School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-533-2712.

13 **City-Wide Radiology Conference** — Location: Mallinckrodt Institute of Radiology, St. Louis, MO. Contact: R. Gilbert Jost, M.D., Chief of Diagnostic Radiology, Mallinckrodt Institute of Radiology, 510 S. Kingshighway, St. Louis, MO 63110. 314/362-7130.

13 - 18 **Health Care Ethics in a Pluralistic Society** — Location: St. Louis University, Margaret McCormick Doisy Learning Resource Center, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand, St. Louis, MO 63104. 1-800-533-2712.

16 - 18 **Vascular Surgery 1991** — Location: The New York Marriott Marquis, New York, NY. Contact: Ann J. Boehme, CMP, Associate Director for Continuing Education, Long Island Jewish Medical Center, New Hyde Park, New York, NY 11042. 718/470-8650.

17 - 19 **Surgical Treatment of Surgical Fractures: Hands-On State-Of-The-Art Workshop** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand, St. Louis, MO 63104. 1-800-533-2712.

17 - 19 **Internal Medicine Review** — Location: University of Missouri, Columbia, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

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Patients will be kept anonymous. Doctors and nurses may also remain nameless.

If you desire more information on this project, read the April 20, 1990 issue of *American Medical News*, page 27.

If you wish to submit stories, please send them, along with your name, address, medical specialty and hospital affiliation to:

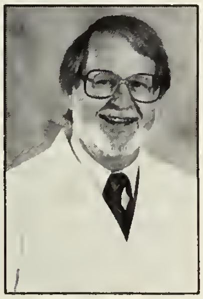
Don Herbert
12327 Erwin Street
North Hollywood, CA 91606
Or Telephone:
818/980-0458

Medical School News

St. Louis University

St. Louis University School of Medicine has announced the formation of the department of pharmacological and physiological science. The new expanded department will carry out research, teaching and service activities formerly performed by the departments of pharmacology and physiology.

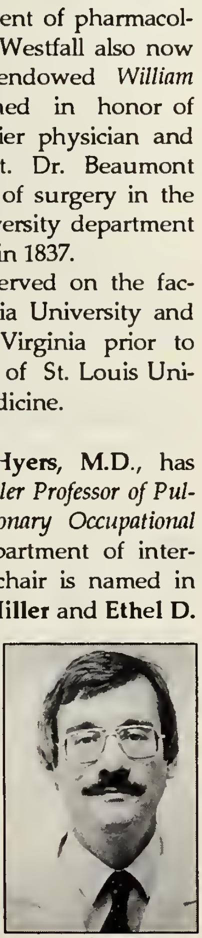
Thomas C. Westfall, Ph.D., has been appointed chairman of the new department. He has served as professor and chairman of the department of pharmacology since 1979. Dr. Westfall also now holds the newly endowed *William Beaumont Chair*, named in honor of the famous frontier physician and pioneer physiologist. Dr. Beaumont served as chairman of surgery in the first St. Louis University department of medicine, formed in 1837.



Dr. Thomas Westfall

Dr. Westfall served on the faculty at West Virginia University and the University of Virginia prior to joining the faculty of St. Louis University School of Medicine.

Thomas H. Hyers, M.D., has been named the *Miller Professor of Pulmonology and Pulmonary Occupational Medicine* in the department of internal medicine. The chair is named in honor of **James B. Miller** and **Ethel D. Miller**, whose endowment supports research, clinical application, and study of the nature, causes, prevention and amelioration of emphysema and related pulmonary conditions.



Dr. Thomas Hyers

Dr. Hyers became director of the division of pulmonology at St. Louis University in 1982. Since 1983, he has been principal investigator of the National Institutes of Health grant for a Specialized Center of Research (SCOR) in adult respiratory distress syndrome (ARDS). Funding for this grant from 1983 through 1993 will total more than $7 million. In addition to the SCOR grant, the NIH funds six other studies conducted by faculty members in the division of pulmonology and pulmonary occupational medicine.

Dr. Hyers was a research fellow and subsequently a member of the faculty at the University of Colorado School of Medicine for five years before moving to St. Louis.

A new experimental AIDS vaccine that is expected to trigger more of a human immune response than those vaccines currently being tested has received federal approval. Researchers at St. Louis University Medical Center and four other centers began clinical testing of the new vaccine in late November.

Robert B. Belshe, M.D., professor of internal medicine and director of the division of infectious diseases and the Center for Vaccine Development at St. Louis University School of medicine is the clinical study chairman.

Dr. Belshe says scientists have genetically engineered synthetic proteins in the lab identical to the proteins produced by viruses during infection. He adds that with other types of vaccines, the more similarity there is between the vaccine and the natural disease-producing proteins, the better the vaccine. Researchers are hopeful that the vaccine will stimulate a better quality of antibodies and induce an immune response similar to that following natural infection without any of the consequences of infection.

This is the sixth AIDS vaccine authorized by the Food and Drug Administration for human testing. St. Louis University Medical Center is one of five AIDS Vaccine Evaluation Units (AVEUs) across the country funded by the NIAID to develop, test and evaluate AIDS vaccines.

A computerized form of surgical forceps developed by a St. Louis University Hospital surgeon has received prominent attention for the instrument's ability to increase the accuracy of brain surgery.

The forceps, developed by **Richard A. Bucholz, M.D.**, assistant professor of neurosurgery, was presented at the Congress of Neurological Surgeons meeting in Los Angeles.

The forceps have increased the level of accuracy from 19 millimeters to two millimeters. It works by using an overhead microphone array that is directly connected to a computer in the operating room. Sound emitted from sensors attached to the forceps is picked up by the surgical forceps at any particular moment in relation to the brain. The computer can determine the location of the forceps in as little as two seconds. Currently, manual calibrations can take up to five minutes to complete.

The hospital has applied for worldwide patent rights on the device.

Many aging men experience hormonal changes similar to the changes women encounter during menopause, say researchers in St. Louis University School of Medicine's division of geriatric medicine, who documented a study published in the October issue of *The Journal of Clinical Endocrinology and Metabolism.*

John E. Morly, M.D., *Dammert Professor* of gerontology and director of the division of geriatric medicine in the department of medicine, says the study shows that many older males do go through the equivalent of menopause. The finding may suggest that some of the muscle weakness and bone disease as well as decreased sexual interest seen in older males may be due to the lack of testosterone.

Others from the division of geriatric medicine involved in the study are **Fran E. Kaiser, M.D.**, associate professor and **Andrew J. Silver, M.D.**, assistant professor. Researchers from the University of California-Los Angeles (UCLA) also participated.

■ Two plastic surgeons from the St. Louis University School of Medicine were awarded top honors for a unique computerized scientific exhibit at the annual meeting of the American Society of Plastic and Reconstructive Surgeons.

William B. Webber, M.D., associate professor of surgery and **Gregory C. Rinehart, M.D.**, assistant professor of surgery, both in the division of plastic surgery, received a first place award for their exhibit, titled, "Microcomputer Animation in Plastic Surgery Education."

The two surgeons use a brand of Macintosh animation software to display the "how-to's" of such procedures as the correction of ear and cleft palate deformities, drooping eyelids and specific techniques of breast reduction surgery. The information is user-friendly and can even be interactive allowing, for example, a prospective plastic surgeon to move a video scalpel.

The division of plastic surgery is now working to develop more complex animated software to enable surgeons to better visualize complicated procedures.

■ **Gary L. LaBlance, Ph.D.**, assistant professor of otolaryngology — head and neck surgery and chief of speech pathology, St. Louis University School of Medicine, has been selected to participate in the first Emerging Leaders Institute sponsored by the American Speech-Language-Hearing Association (ASHA). Dr. LaBlance is one of 50 people from the 62,000-member organization selected to attend the Institute. He will also become president of the state chapter of ASHA this year.

The Emerging Leaders Institute is designed to identify and develop leadership among professionals in the field of communication sciences and disorders. According to **Roy A. Koenigsknecht, Ph.D.**, president of ASHA, Dr. LaBlance was chosen for outstanding leadership potential following the nationwide nomination process.

Dr. LaBlance joined the staff of St. Louis University School of Medicine last year. In addition to his faculty positions, he is also the director of the otolaryngology department's Voice Laboratory.

■ The department of otolaryngology at St. Louis University School of Medicine is now using sophisticated computerized diagnostic equipment to evaluate complaints of dizziness.

Douglas L. Beck, M.A., clinical instructor and chief audiologist in the department of otolaryngology, said dizziness is most often caused by vestibular (inner ear) disorders but can also be caused by problems within the central nervous system, which connects the eyes and the ears. Dizziness can be evaluated by stimulating the sensory nerves of the ear and measuring the response of the eyes with a test called electronystagmography (ENG). This testing allows for accurate diagnosis of the site of dysfunction for balance disorders. Once the site has been determined, the otologist or neurotologist can treat the disorder medically or surgically.

■ Preliminary results of research conducted at St. Louis University Medical Center indicate that chronic sinusitis can be more effectively treated by combining a nasal steroid spray with antibiotic therapy.

Howard M. Druce, M.D., assistant professor of internal medicine in the division of allergy and immunology and assistant professor of otolaryngology at St. Louis University School of Medicine said research indicates that patients treated with the anti-inflammatory drug, and antibiotics simultaneously experienced a faster rate of recovery.

The topical nasal steroid spray has already received federal approval to treat allergic rhinitis. Research on the drug was funded by a one-year, $17,5000 grant from Syntex Laboratories, Inc.

■ The Anxiety Disorders Center at St. Louis University School of Medicine is conducting a research study to evaluate a new type of behavioral treatment method for victims of agoraphobia, one of the most disabling anxiety disorders. The condition can leave individuals confined to their home, avoiding situations that might cause them to panic. A grant from the National Behavior Therapy Research Foundation is funding the research.

C. Alec Pollard, Ph.D., associate professor of psychiatry and human behavior and director of the Anxiety Disorders Center in the division of behavioral medicine, said researchers are comparing two new behavioral treatments for patients diagnosed with agoraphobia that differ in how a patient is taught to manage and reduce panic attacks.

Newer forms of behavior therapy for reducing panic have thus far been used to treat only simple cases of panic disorder and have been found to be very effective. Dr. Pollard's study will examine if the more complicated and severe cases of panic disorder, such as agoraphobia, can also be treated effectively using these same types of strategies.

Washington University

■ **Robert H. Waterston, M.D., Ph.D.**, professor of genetics and associate professor of anatomy and neurobiology at Washington University School of Medicine in St. Louis, has received a $3.8 million grant to develop large scale DNA sequencing methods.

The three-year award comes from the National Institutes of Health's (NIH) Center for Human Genome Research. It supports in part the collaborative effort between Waterston's group at the School of Medicine and the group of **John Sulston** and **Alan Coulson** at the Medical Research Council (MRC) Laboratory of Molecular Biology in Cambridge, England. The MRC will provide $1.9 million in funding.

Waterston is recognized for his genetic research involving muscle development in the nematode and recently received MERIT status from the NIH to continue that work.

The Department of Psychiatry at Washington University School of Medicine in St. Louis has established a new program offering specialized care for obsessive compulsive disorder (OCD) patients. The Obsessive Compulsive Disorder Service provides behavior and family therapy, both on an individual basis and in a group format, as a supplement to any medication treatment patients already receive. The most effective treatment for the illness is a combination of behavior therapy and medication.

According to **Elliot Nelson, M.D.**, director of the service, the nature of the symptoms alone may be extremely disturbing to family members, and the force of the symptoms will often place confusing demands on the family, in addition to those placed on the patient. He says family education and therapy is an important part of the OCD Service.

Nelson will evaluate each patient accepted into the service, and work with the patient's physician to tailor a therapy program. For more information about the service, call 314/362-2465.

Two new community health outreach centers, HealthStreet, opened recently in St. Louis. Funded by a National Institute on Drug Abuse grant awarded to Washington University School of Medicine, the centers provide public health services in addition to offering AIDS education and HIV testing. Testing and referral for tuberculosis, diabetes and high blood pressure will be offered, as will family planning and immunizations.

Epidemiologist **Linda B. Cottler, Ph.D.**, principal investigator of the study, recognizes the need to provide treatment programs for intravenous drug users who are also at risk for HIV infection. This project enables the investigators to educate the high-risk population and monitor their habits following treatment.

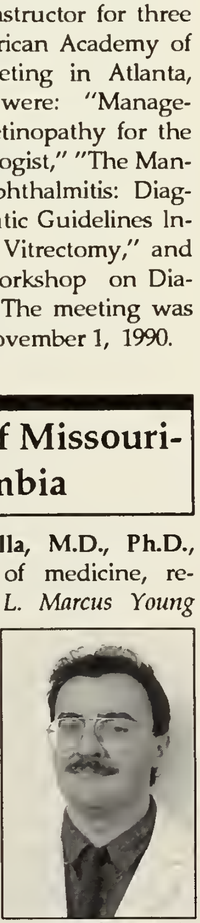
The centers are part of a $3.5 million project in the School of Medicine's psychiatry department. The purpose of the project is to persuade drug users to seek treatment by providing 300 new treatment slots at a drug free program and a methadone maintenance clinic. Treatment is provided free of charge. In addition, the project will provide street outreach in high risk areas to educate the community on ways to reduce the risk for HIV infection. The centers are located at 4624 Delmar and 3553 Gravois. For more information, contact Dr. Cottler at 314/362-2465.

R. Joseph Olk, M.D., associate professor of clinical ophthalmology at Washington University School of Medicine, was an instructor for three courses at the American Academy of Ophthalmology meeting in Atlanta, GA. The courses were: "Management of Diabetic Retinopathy for the General Ophthalmologist," "The Management of Endophthalmitis: Diagnostic and Therapeutic Guidelines Including the Use of Vitrectomy," and "Diabetes 2000 Workshop on Diabetic Retinopathy." The meeting was held October 28 - November 1, 1990.

University of Missouri-Columbia

Christian Brilla, M.D., Ph.D., assistant professor of medicine, received the *Melvin L. Marcus Young Investigator Award* November 13, 1990 at the American Heart Association's annual meeting in Dallas, TX.

The honor, awarded by the AHA's Circulation Council, recognized an outstanding scientist under age 40 who conducts basic cardiovascular research. Brilla, 34, competed against cofinalists from New York, Oxford University (United Kingdom) and the University of Iowa.



Dr. Christian Brilla

Brilla is a member of the research team headed by **Karl T. Weber, M.D.**, MU's new director of cardiology. Before coming to MU last summer, Brilla was a research scientist at Michael Reese Hospital and Medical Center, affiliated with the University of Chicago. Their work focuses on identifying the origins of heart failure, with a view toward developing medical therapies that will restore abnormal myocardial structure to normal and thereby relieve the symptoms of heart failure.

In May, the Chicago Society of Internal Medicine awarded Brilla its *Robert M. Kark Research Award.* In recent months, he has given invited lectures at international meetings in Japan, Belgium and Germany.

Leonard R. Forte, Ph.D., professor of pharmacology, has been chosen to serve on the editorial board of the *American Journal of Physiology*, Endocrinology and Metabolism section, for a three-year term.

Bruce Harry, M.D., associate professor of psychiatry, took part in the recent 21st annual meeting of the American Academy of Psychiatry and the Law in San Diego. He moderated a session and gave a presentation at a meeting for former directors of residency training who are involved in forensic psychiatry.

H.D. Kim, Ph.D., professor and chairman of pharmacology, was chosen to serve on the editorial board of the *American Journal of Physiology*, Regulatory, Integrative and Comparative Physiology section, for a three-year period.

Albert Y. Sun, Ph.D., associate professor, and **F.F. Ahmad Oldfield, Ph.D.**, assistant research professor, both of the department of pharmacology, were primary authors of presentations made recently at the 20th annual meeting of the Society for

Neuroscience in St. Louis.

■ Four members of the MU department of psychiatry participated in the recent XII World Congress of Social Psychiatry in Washington, D.C.

Armando R. Favazza, M.D., professor and associate chairman, presented a paper on pathological self-mutilation, served as a discussant for a section on new antidepressant medications and was named chairman of the publications committee for the Congress. Favazza also co-authored a paper on "Drug Choice: The Role of Psychiatry," presented by **S. Jay Lensgraf, M.D.**, assistant professor. In addition, Favazza recently was appointed to the editorial board of the *Journal of Religion in Psychotherapy*.

Arthur J. Robins, Ph.D., professor, spoke on "Resolution of Intergroup Conflict," and was a discussant in the session on violence, aggression and conflict.

James M.A. Weiss, M.D., professor and chairman, presented a paper on civilization and psychopathy, co-authored by **Niels C. Beck, Ph.D.**, associate professor. Weiss also chaired and served as a discussant for the section on "Issues in Social Psychiatry."

■ School of Medicine faculty from three departments were primary authors of papers presented at the recent annual meeting of the American Society of Bone and Mineral Research in Atlanta, GA. They were **Judith A. Cole, Ph.D.**, instructor of pharmacology; **Laura S. Hillman, M.D.**, professor of child health; and **Susan H. Allen, M.D.**, assistant professor of medicine.

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This Program is acceptable for 11 prescribed hours by the Greene County Medical Society Continuing Medical Education Committee.

New Members

■ **Janet E. Akremi, M.D.**, Family Health Care, Box 416, Greenfield 65661, has become a member of the Dallas-Hickory-Polk-Dade County Medical Society. Dr. Akremi received her preliminary education at Stephens College and obtained her medical degree at the University of Missouri-Columbia School of Medicine in 1984. She completed her residency at the University of Missouri Hospital and Clinics, Columbia, MO. Dr. Akremi specializes in general practice.

■ **James M. Brennan, M.D.**, 5957 Highfield Rd., St. Louis 63109, has become a member of the Missouri State Medical Association. Dr. Brennan specializes in obstetrics/gynecology.

■ **Robert L. Bynum, D.O.**, Ashland Medical Clinic, 117 E. Broadway, Ashland 65010, has become a member of the Boone County Medical Society. Dr. Bynum received his preliminary education at Northeast Missouri State University and obtained his osteopathic degree at the Kirksville College of Osteopathic Medicine in 1982. He completed his residency at Still Osteopathic Hospital, Jefferson City, MO. Dr. Bynum specializes in family practice.

■ **Mary M. Davis, M.D.**, 3400 W. Truman Blvd., Jefferson City 65109, has become a member of the Boone County Medical Society. Dr. Davis received her preliminary education at Indiana State University and obtained her medical degree at the Indiana State University School of Medicine in 1985. She completed her residency at Indiana University Hospitals, Indianapolis, IN. Dr. Davis specializes in radiation oncology.

■ **Randolph M. Freeman, M.D.**, 621 S. New Ballas Rd., #629, St. Louis 63141, has become a member of the Missouri State Medical Association. Dr. Freeman received his preliminary education at the University of Illinois and obtained his medical degree at the Texas A & M University School of Medicine in 1985. He completed his residency at Scott & White Hospital, Temple, TX. Dr. Freeman specializes in anesthesiology.

■ **Robin R. Jones, M.D.**, P.O. Box 975, Eastgate Building, Columbia 65201, has become a member of the Boone County Medical Society. Dr. Jones received her preliminary education at Texas Christian University and obtained her medical degree at the University of Missouri-Kansas City School of Medicine in 1985. She completed her residency at the University of Missouri Hospital and Clinics, Columbia, MO. Dr. Jones specializes in anesthesiology.

■ **Gary M. Kramer, M.D.**, 17421 Medical Center Parkway, Independence 64057, has become a member of the Missouri State Medical Association. Dr. Kramer received his preliminary education at Northwestern University and obtained his medical degree at Rush Medical College in 1985. He completed his residency at Rush Presbyterian St. Luke's Medical Center, Chicago, IL. Dr. Kramer specializes in othopaedic surgery.

■ **Steven M. Mardjetko, M.D.**, 1465 South Grand Blvd., Suite 528, St. Louis 63104, has become a member of the Missouri State Medical Association. Dr. Mardjetko received his preliminary education at Illinois Benedictine College and obtained his medical degree at the University of Illinois Medical School in 1982. He completed his residency at the University of Illinois, Chicago, IL. Dr. Mardjetko specializes in orthopaedic surgery.

■ **Pamela S. Peigh, M.D.**, 3635 Vista at Grand, P.O. Box 15250, St. Louis 63110, has become a member of the Missouri State Medical Association. Dr. Peigh received her preliminary education at DePauw University and obtained her medical degree at the Indiana University School of Medicine in 1977. She completed her residency at Indiana University, Indianapolis, IN. Dr. Peigh specializes in cardiothoracic surgery.

■ **Latha Ravi, M.D.**, Metropolitan Medical Center West, 530 Des Peres, St. Louis 63131, has become a member of the Missouri State Medical Association. Dr. Ravi received her preliminary education in India and obtained her medical degree at the Guntar Medical College of India in 1975. She completed her residency at Jewish Hospital, St. Louis, MO. Dr. Ravi specializes in physical medicine and rehabilitation.

■ **Radomysl M. Twardowski, M.D.**, 1 Hospital Drive, Columbia 65212, has become a member of the Boone County Medical Society. Dr. Twardowski received his preliminary education at the University of Poland and obtained his medical degree at the University of Missouri-Columbia School of Medicine in 1986. He completed his residency at Griffin Hospital, Derby, CT. Dr. Twardowski specializes in internal medicine.

■ **Oliver J. Wolfe, M.D.**, 11133 Dunn Rd., St. Louis 63141, has become a member of the Missouri State Medical Association. Dr. Wolfe received his preliminary education at Lafayette College and obtained his medical degree at the U.C.E.- San Pedro in 1983. He completed his residency at Maimonides Medical Center, Brooklyn, NY. Dr. Wolfe specializes in anesthesiology.

■ Resident Members

Jeffrey L. Borders, M.D. — *radiology*
Richard W. Burns, M.D. — *internal medicine*
Christopher J. Conlin, M.D. — *nuclear medicine*
Joel D. Hassien, M.D. — *diagnostic radiology*
Loren M. Marshall, M.D. — *internal medicine*

Student Members

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Rhonda K. Southerland

Washington University

Andrea E. Bonny
Michael G. Jakoby, IV
Patti M. Nemeth
Christopher E. Smith

St. Louis University

Randy Agolia
George Anderson
David S. Brink
Sonya F. Campbell
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Michael H. Darmadi
Brent Davis
Bradley K. Draper
Manjula Dundoo
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Raja Fattaleh
Christopher T. Harrigan
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References:

1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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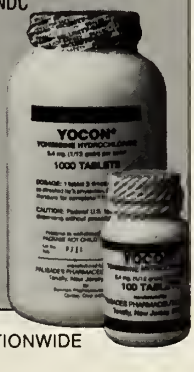

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In Memoriam

■ **William R. Bynum, D.O.,** died November 24, 1990 at the age of 63. Dr. Bynum, a pathologist, practiced medicine in Columbia for 20 years. Together with John Boyce, he founded Boyce and Bynum Pathology Laboratories in 1965. He served as medical director until his retirement in 1984. Prior to coming to Columbia, he practiced medicine in Pryor, Oklahoma for 10 years. He obtained his medical degree at the University of Oklahoma in 1951. Dr. Bynum was a member of the Boone County Medical Society.

■ **Burleigh E. DeTar, Jr., M.D.,** died November 12, 1990 at the age of 68. Dr. DeTar, a surgeon, practiced medicine in Joplin for 13 years. From 1965 to 1989, he worked for Veterans Administration Hospitals in Dearborn, Michigan, and Prescott, Arizona. He retired in 1989 and returned to Joplin. He obtained his medical degree at the University of Kansas Medical School in 1945. Dr. DeTar was a member of the Jasper County Medical Society.

■ **Eugene F. McDonald, M.D.,** died October 21, 1990 at the age of 75. Dr. McDonald, a general practitioner, practiced medicine in Jackson for 37 years before retiring in 1984. He obtained his medical degree at the St. Louis University School of Medicine in 1943. Dr. McDonald was a member of the Cape Girardeau County Medical Society.

■ **Leslie G. Reed, M.D.,** died October 26, 1990 at the age of 75. Dr. Reed, a family practitioner, practiced medicine in Granite City, Illinois from 1961 to 1975, then at John Cochran VA Hospital until his retirement in 1984. He obtained his medical degree at the University of Illinois College of Medicine in 1950. Dr. Reed was a member of the St. Louis Metropolitan Medical Society.

Physician's Recognition Awards

Forty-five MSMA members qualified for the MSMA-AMA Physician's Recognition Award during October 1990. The award, presented by the Missouri State Medical Association and the American Medical Association, is given to those physicians who voluntarily complete 150 credit hours of continuing medical education within a three-year period. Sixty of the credit hours must be earned in Category 1 programs.

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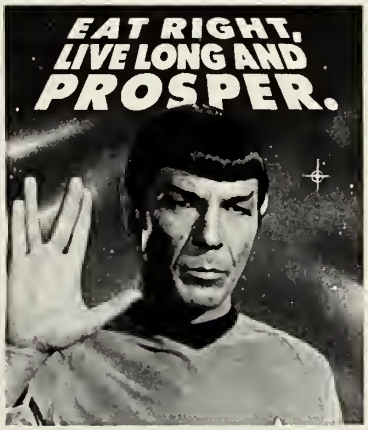

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- Hypersensitivity reactions have been reported in about 1.5% of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs' tests each occur in less than 1 in 200 patients. Cases of **serum-sickness-like** reactions have been reported with the use of Ceclor. These are characterized by findings of erythema multiforme, rashes, and other skin manifestations accompanied by arthritis/arthralgia, with or without fever, and differ from classic serum sickness in that there is infrequently associated lymphadenopathy and proteinuria, no circulating immune complexes, and no evidence to date of sequelae of the reaction. While further investigation is ongoing, **serum-sickness-like** reactions appear to be due to hypersensitivity and more often occur during or following a second (or subsequent) course of therapy with Ceclor. Such reactions have been reported more frequently in children than in adults with an overall occurrence ranging from 1 in 200 (0.5%) in one focused trial to 2 in 8,346 (0.024%) in overall clinical trials (with an incidence in children in clinical trials of 0.055%) to 1 in 38,000 (0.003%) in spontaneous event reports. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy; occasionally these reactions have resulted in hospitalization, usually of short duration (median hospitalization = two to three days, based on postmarketing surveillance studies). In those requiring hospitalization, the symptoms have ranged from mild to severe at the time of admission with more of the severe reactions occurring in children. Antihistamines and glucocorticoids appear to enhance resolution of the signs and symptoms. No serious sequelae have been reported.
- Stevens-Johnson syndrome, toxic epidermal necrolysis, and anaphylaxis have been reported rarely. Anaphylaxis may be more common in patients with a history of penicillin allergy.
- Gastrointestinal (mostly diarrhea): 2.5%
- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
- As with some penicillins and some other cephalosporins, transient hepatitis and cholestatic jaundice have been reported rarely.
- Rarely, reversible hyperactivity, nervousness, insomnia, confusion, hypertonia, dizziness, and somnolence have been reported.
- Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1% and, rarely, thrombocytopenia and reversible interstitial nephritis.

Abnormalities in laboratory results of uncertain etiology.
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Missouri Medicine

Journal of the Missouri State Medical Association February 1991

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"Winter Camp," is an 18 X 24 oil painting by **Peggy Moffett**, a Missouri artist from Bolivar, Missouri. The painting of a creek in winter was completed during the fall of 1990. Ms. Moffett has been painting for 12 years and has her own studio in Bolivar. She also works at the Dunnegan Art Gallery.

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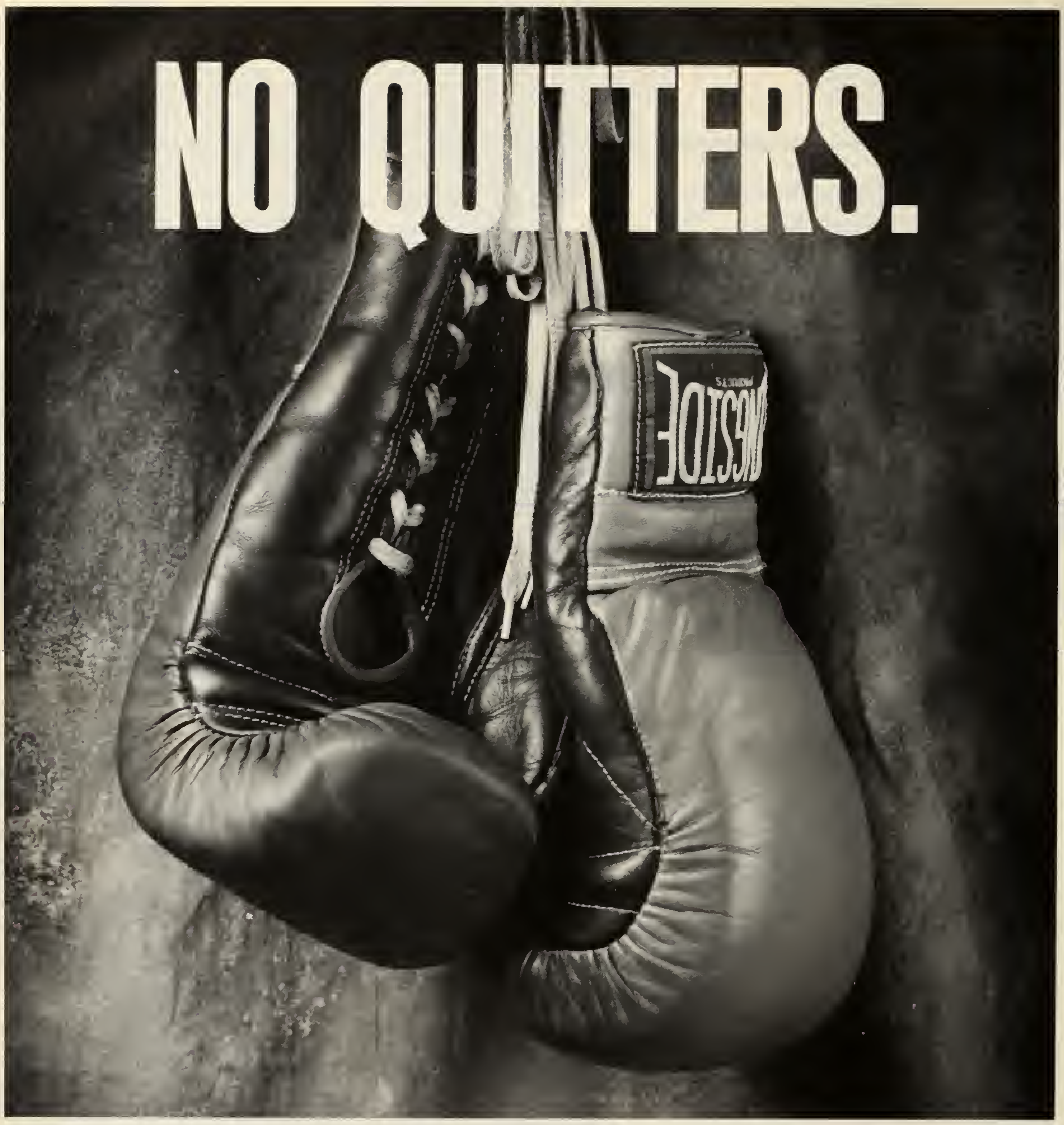

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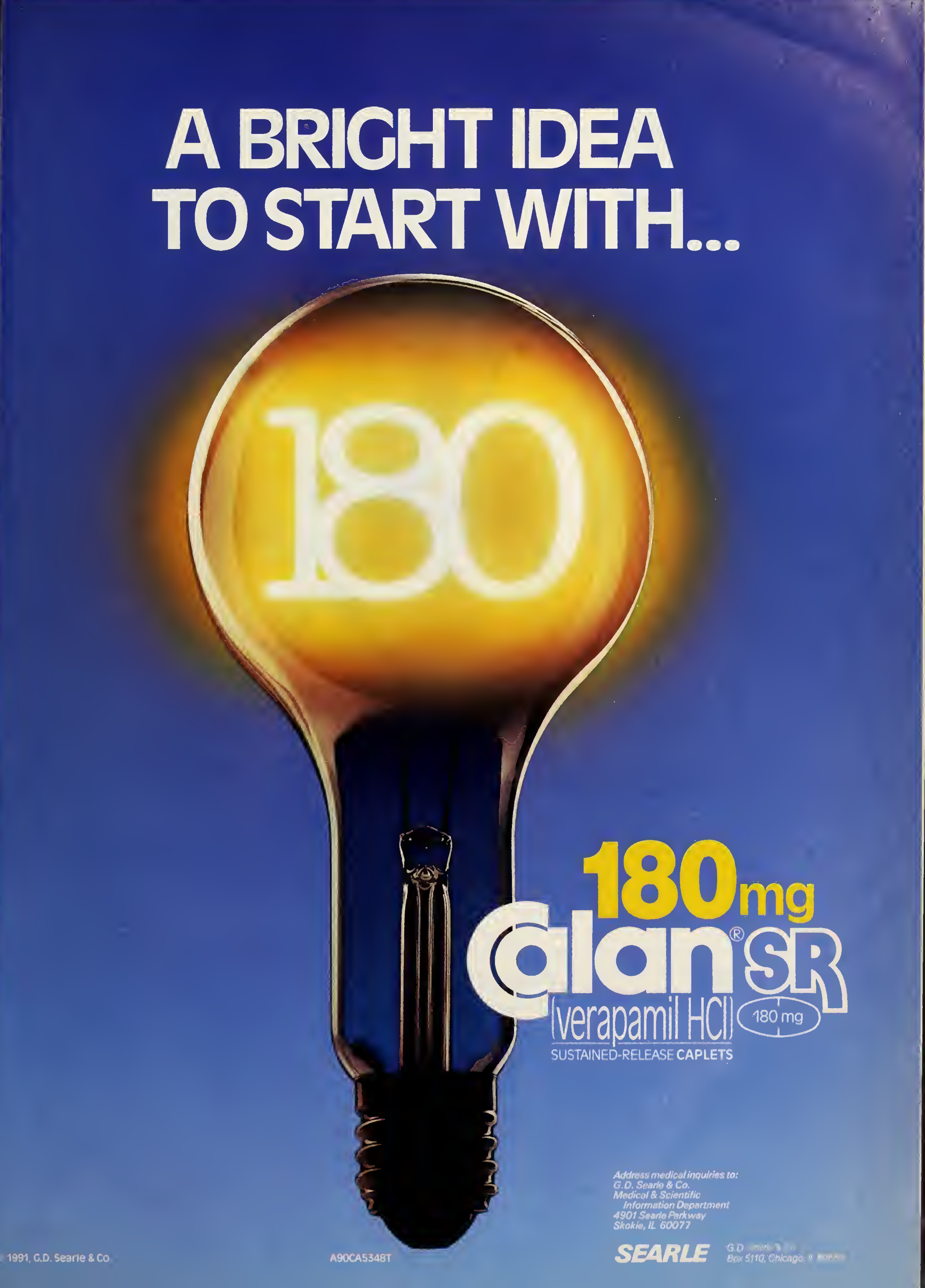

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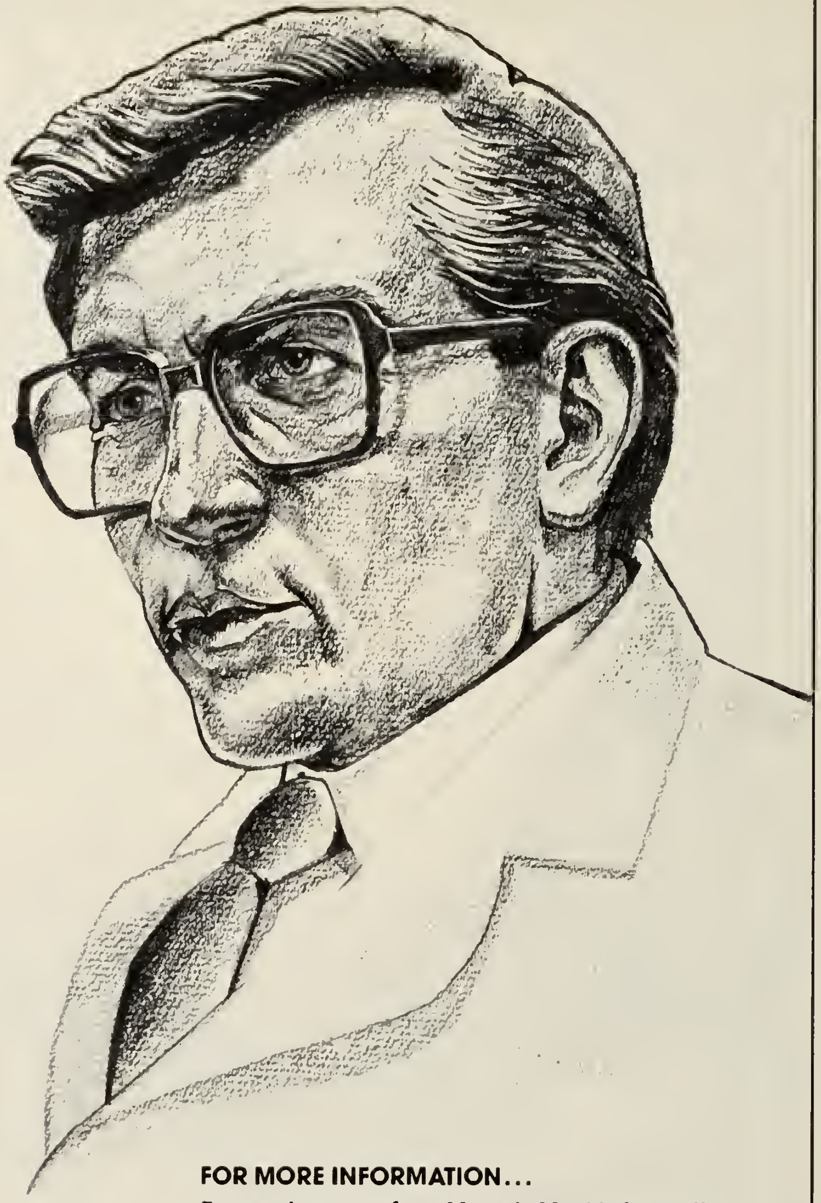

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GUEST EDITORIAL

by Maria L. Evans

Have you ever noticed that many things that were "never meant to be anything" seemingly always turn out to be something in spite of themselves?

Thinking About What We Leave Behind

One of the most satisfying things about being a bricklayer's child is driving along and admiring all the beautiful buildings my dad has left behind during the course of his career. Many of these buildings are on the campuses of universities I've attended. He also worked for a company that installed gym floors, and many of my high school basketball games were played on gym floors he had laid in my childhood.

Even his not-so-beautiful buildings have a legacy of their own. During one of my teenage summers, we had a literal explosion of goats, chickens, dogs, and mules at our place. Dad solved the "housing shortage" by cobbling together a number of outbuildings from available wood and tin scraps. Seventeen years later, I laughingly realized that those tattered outbuildings, which Dad himself admitted "were never meant to be anything," still teetered defiantly in the back lot —much to my mom's consternation.

It was never meant to be anything. Have you ever noticed that a good many things that were "never meant to be anything" seem to stay around forever? Some "temporary" buildings built after World War II became a mainstay of the University of Missouri School of Veterinary Medicine for more than 40 years. Laws originally designed to be stopgap measures get on the books and hang around for years. Yankee first baseman Wally Pipp just wanted a day off — and a kid named Lou Gehrig played his position and stayed there for 2,130 consecutive games.

How many times do we, as physicians and future physicians, leave something behind that was "never meant to be anything?" Maybe it was the conversation in the elevator or in the chart room. Maybe it was the remark in the hall about something else entirely that the patient overheard and thought pertained to him. Perhaps it was an "editorial" in the chart, or the note stuck on top of it where everyone could see. Many times, we say we were too busy, too tired, too stressed, or too overworked —when, in truth, maybe we just didn't think enough about what we were leaving behind.

Then, along comes Big Business, Big Government, and Big Law, and the first thing they notice is the dilapidated old outbuilding we left behind — never mind the fact that it sits on a lot full of bricks. Every time we see a patient, talk to a patient, advise a patient, we're handing out a brick — but, as this bricklayer's child can tell you, bricks are funny things. Truthfully, bricks are pretty ignorant-looking objects when they're just sitting feebly in a pile with no plan or direction. Only with planning and mortar and sweat do they become majestic buildings. Give someone a plain old brick, with no blueprint behind it, and a person's just as likely to tie a note on it and toss it through your window as not.

None of us are safe from

continued on page 70

Guest Editorial

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hardship. Every one of us, at some time or another, will unintentionally erect a few tarpaper shacks due to lack of foresight or thought. Some of us may get called down for it — by a lawyer, an insurance company, Medicare/Medicaid, or even one of our patients. I truly believe, though, that the reason some of our colleagues can endure, survive, and even thrive during times of financial or legal peril is because they did just a little more than hand out bricks. Someone (or many someones) stood up, grabbed Big Business, Big Government, or Big Law by the shirt collar and pointed out all the brick houses, brick patios, and brick barbecue pits those physicians helped erect despite the presence of a ratty old shed or two.

No one can deny that the practice of medicine "isn't what it used to be." Few will dispute that many of the changes in medicine over the last few years have not necessarily been for the better. Despite the ravages of these changes, however, I still see a lot of solid brick buildings among the weeds, and am buoyed by the hope that the magic of change is that it can change for the better, as well. Maybe each of us should spend a little more effort thinking about what we leave behind, and be bricklayers instead of hod carriers. ■

Editor's Note: Maria Evans is a fourth year medical student at the University of Missouri-Columbia School of Medicine. She also serves as Councilor for the medical student section of MSMA.

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GUEST EDITORIAL

by Ross C. Brownson, Ph.D. and Michael C. Perry, M.D.

In Missouri, legislation to control tobacco use severely lags behind other states who have beaten us to the punch by passing such laws. It is time to make some changes, and you can help.

Editor's Note: *Dr. Brownson is Director of the Division of Chronic Disease Prevention and Health Promotion, Missouri Department of Health in Columbia, Missouri. Dr. Perry is Professor and Chairman of the Department of Medicine at the University of Missouri-Columbia School of Medicine.*

Missouri Leads the Nation: And That Needs to Change

Cigarette smoking is the single leading cause of death in Missouri. Each year, more than 10,000 Missourians die from smoking-related causes; all of these deaths are preventable. With each new year, this insanity is perpetuated. Recent data show that smoking rates among Missouri youth are higher than nationwide averages — 30% of 12th grade girls and 28% of 12th grade boys smoke at least once weekly.

Smokeless tobacco use is also a major public health problem in Missouri, especially among youth. Oral cancer is the major health consequence of smokeless tobacco use and an epidemic of oral cancer may be in Missouri's future if use rates for snuff and chewing tobacco are not curbed. Presently, 21% of high school senior boys use smokeless tobacco on a weekly basis, with use rates higher than 30% in rural areas. The average age when boys begin using smokeless tobacco is 10.7 years.

Physicians play a prominent role in tobacco use prevention and cessation. It is well documented that even minimal advice from a physician can have a powerful effect on smoking reduction among patients. Excellent materials are available to physicians and other health professionals who want to address tobacco prevention and cessation in their practices. These have been discussed in earlier *Missouri Medicine* articles (1990;87:25 and 1990;87:683).

Another critical area where physicians can have a major effect is in policy development and implementation. Missouri sorely lags behind other states in legislation pertaining to tobacco control. For example:

- Missouri is one of only five states with no restrictions on smoking in public places. The "Clean Indoor Air Act" has been proposed in the Missouri legislature for a decade, yet has been defeated each year by the pro-tobacco lobby.
- Missouri also is one of only five states not restricting tobacco sales to minors. Legislation dealing with this important issue is being considered in the current legislative session.
- Missouri places no state tax on smokeless tobacco products. A proposal to tax smokeless tobacco and use the proceeds to fund school health nurses has been considered for the past few years and currently is being debated. Taxing these products would not only curb use but would fund a health education activity in critically short supply.

Does Missouri want to be the last state to pass these key legislative measures? With a small investment of time, you can ensure that this is not the case. Write or call your state representative and senator and let them know that you *strongly* support bills to limit tobacco use in Missouri. We face the best-funded political lobby in the world and without active support from individuals and organizations, Missouri will continue to pile up statistics of which none of us can be proud. ■

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EDITOR'S DESK

by Donald G. Sessions, M.D.
Editor

What Are We To Do?

It began as an upper respiratory infection. He had cold symptoms including a sore throat and hoarseness. His doctor had treated him with two courses of antibiotics. The hoarseness didn't clear, so he was referred for evaluation.

A heavy smoker since the age of 14, he showed little surprise when I found an advanced cancer of his larynx. After three months and a total laryngectomy followed by a full course of radiation therapy, he began the process of relearning to speak. Having a long history of taking care of patients with this stage of disease, I am able to prognosticate successfully that he has an excellent chance for cure of his cancer. There is, of course, the change in his ability to communicate and the permanent tracheostome to endure. Among other physical issues, he has difficulty coughing, his constipation is worse since he cannot strain, and he has trouble lifting heavy objects. On top of all this, his wife won't sleep with him anymore.

But, life is tough and patients are tough. Doctors, too, are tough. We have done our job; we have made the diagnosis, and we have recommended and accomplished successful treatment. It's another modern medical miracle. So why don't I feel as euphoric as I used to feel?

It's not that I'm not enthusiastic about seeing this patient and diagnosing his problem and using my hard-learned surgical skills to lead the therapeutic team. For sure, seeing a patient with a lesion that I am specifically trained to handle, being certain of a successful outcome, and having a direct hand in the curative process gives me immense personal and professional satisfaction. It makes my day and allows me to overlook the minor irritations that intrude in my work as a physician. It's just that I am a different observer of the process now than when I was younger. It may be that my focus is also different.

It has been said of American medicine that its strength lies in its focus on the individual. Our form of medicine is practiced one patient at a time. Over the last 40 years we have risen to our present position of excellence by producing an extraordinary capability in caring for the individual patient. Our medical schools taked gifted university students and mold them into tomorrow's doctors. The knowledge base in medical school programs has changed and there is a new focus on new developments in technology. The approach is still to teach the "basic sciences" initially followed by an applied training educational program in the clinical sciences — surgery and medicine. The doctor produced by these programs is someone with good understanding, from the molecular level to the highest biological level, of human function. The major

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thrust of the clinical years is to study and examine humans from the disease perspective so distinctions can be made to identify abnormality and institute treatment – and all of this for curative health services for the individual patient.

The present crisis in health care is what one would expect if all patients were tested and treated for all abnormalities and individual patients had limited resources to pay for their care. Presently, this is indeed the case, with the exception of the 20 to 30 million patients who are unable to participate in this "maximal care" medical program due to lack of resources. At the same time, a geometric increase in the cost of medical care exists. Current projections have Medicare exceeding both defense spending and social security by sometime in the first decade of the next century.

What are we to do? Somehow allocation of resources doesn't do justice to the issue of what to do about health care. The question remains – how can a society keep its citizens healthy? America, with its "best health care system in the world" does not keep its people as healthy as many other industrial countries. An American male is fifteenth in the world in life expectancy and American females are eighth. We are twentieth in infant mortality. Twelve nations have lower rates of cancer, and twenty-five nations have better cardiovascular health. For all our spending we do not keep our people as healthy as the Japanese, the Canadians, or the Europeans.[1]

There are many reasons for this situation. Certainly, the heterogeneity of our society plays a big part. No one has said that the fault lies with the doctors, but some have suggested that the way we practice medicine has a major effect on the direction of health care spending. Although the solutions will be societal and political in nature, the debate will require making ethical decisions. How will we as a people decide the who and the how of basic health care?

Practically speaking, the target population that should receive basic health care regardless of ability to pay must include uninsured persons who are presently ineligible for current programs as well as current recipients. The next question is, once we decide who receives care, what care will be covered? Determinants of basic health care include: 1) Probability that the service will achieve the desired result (efficacy); 2) Quality of life resulting from providing or not providing the service; 3) Economic cost of providing or not providing the service; and 4) Cost of the service.

All of these determinants are available for study. We as doctors and scientists, individually and as a group, are uniquely positioned to study efficacy and quality of life questions. This will be medicine's corporate contribution to policy decisions in this decade. At the same time, we can lead the way in educating the public and our political leaders to see that more resources must be made available to handle the root causes of poor health – poverty, poor housing, and poor schools. Improvements in human health have occurred mainly because of improved standards of living including improved nutrition, decisions about family size and birth control, and such public health measures as sanitation, refrigeration, chlorination, and vaccination.[2]

The main reasons people die before their time presently include: cigarettes, diet, alcohol and other drugs, and gun shots. Approximately two-thirds of all deaths before age 65 are essentially self-imposed.[3] It must be clear to thoughtful people how absurd it is to continue spending our health dollars by treating symptoms instead of eliminating causes. This is why my personal euphoria for spectacular cancer cures has vanished. This is why the arrogance of my professional youth has been replaced by an understanding that although we will continue to improve the care of individual patients, the answer to the conundrums of modern health care must lie in our corporate and unified approach to groups of patients.

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WANTED: COVER ART

If you haven't already noticed, take another look at this month's cover. *Missouri Medicine* prides itself on its beautiful covers, featuring the work of Missouri artists – some of whom are physicians like yourself. If you would like to see your work on our cover, send your 35mm slides to: *Missouri Medicine*, P.O. Box 1028, Jefferson City, MO 65102.

PRESIDENT'S PAGE

by Gary A. Dyer, M.D.
MSMA President

The bottom line: On the federal and state level, we need to focus on the aspects of tort reform that will translate into fewer malpractice suits, decreased premiums, and less defensive medicine.

Tort Reform or Tortuous Deformity?

Ask Missouri physicians to give their views on medical tort reform and they usually respond unpleasantly. The following are some of the grumbling remarks I have heard over the last two years:

- Physicians have been taken to the cleaners in this state. What we have is tortuous deformity in the legal system, not tort reform.
- Trial attorneys have guaranteed deep pockets; hospitals have someone to share the heat.
- Malpractice carriers are making big profits, and more carriers are entering the state.
- Those premium decreases I heard about? Didn't happen to me. Must be Class I physicians.
- You know, Dr. Dyer, we are just in an insurance cycle. Mark my words, premiums will skyrocket in a few years.
- The moratorium favored trial attorneys; The hospitals are not disappointed either.
- MSMA should have stayed out of that committee [CPHC]. We spent a ton of money and got nothing to show for it.
- You go to those state meetings; Why didn't you just push something through the legislature and solve the problem?

These examples illustrate the very real sense of frustration felt by Missouri physicians regarding Senate Bill 663, the 1986 Missouri Malpractice Tort Reform Act. The foundation of this frustration seems to be the fact that malpractice insurance premiums did not immediately and dramatically decrease once the law was enacted.

Medical liability insurance premiums have been reduced 20%-30% just in the last year by certain carriers in Missouri because of improved claims experience. In Missouri, according to the Division of Insurance statistics,[1] the 1989 claim count dropped 16% to 1,685 total claims with 65.2% of claims being closed without payment. The average indemnity paid on claims closed with payment in Missouri (1989) was $71,689, a 2.5% increase. The large decrease in claims outweighed the increase in payments.

Is the reduction of claims in Missouri based on tort reform measures that are finally bearing fruit? Carriers believe the affidavit portion of the tort reform law is directly or indirectly decreasing the number of frivolous suits filed. Indirectly, the affidavit requirement causes more cases to be referred to experienced trial attorneys skilled at weeding out those without merit.

Improved claims experience could be due to tort reform, but this reason must not be accepted at the exclusion of other possibilities. Complicating the picture is a nationwide drop in the number of cases litigated. A.M. Best & Co., claims that underwriting losses have fallen in the United States for the last five years. Further confusion is added, in Missouri at least, by the reduction in number of court decisions favoring the plaintiff.[1] In 1983, 50.6% of court decisions went to the plaintiff. In 1989 the percentage fell to 31.9%. This drop reflects changing jury attitudes and/or increas-

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President's Page

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ing numbers of unjustified claims. Other considerations include settlement of a greater percentage of "no win" meritorious cases out of court, more vigorous defense of physicians, and more defensible record keeping by physicians.

The affidavit, modified joint and several liability, and caps on non-economic damages should help Missouri physicians, but I believe it is still too early to predict long-term benefits. Only in the last year have cases come to trial or settlement under the new tort reform law, and only very recently has the first case been filed that challenges its legality. Also, not enough time has passed for any wormholes in the law to be found by trial attorneys.

The 1989-1990 meetings of the Committee to Preserve Health Care (CPHC) and the Missouri Association of Trial Attorneys (MATA) produced very limited results. MATA's Tolling Letter request was refused. This change, as part of the law, would have extended the statute of limitations 90 days (12.5% increase), for those cases filed within 30 days of the end of the two-year statute of limitations. MATA would not accept our one word change ("may" to "shall") in the affidavit language, which would have returned the wording to the original 1986 draft meaning agreed to by both sides. They turned down our suggestion for reduction of medical liability insurance limits across the state, but did agree for the first time, that expansion of the State Legal Defense Fund was not a tort matter.

The MSMA House of Delegates (A90) formed the Blue Ribbon Medical Liability and Tort Reform Committee and referred to it all 14 resolutions dealing with the subject. The committee was appointed and charged with the responsibility of recommending to the MSMA Council the position MSMA should take on medical liability and tort reform during the 1990-1991 Missouri General Assembly. Dr. Pat Harr from Maryville, did an excellent job in chairing three intense meetings of the Blue Ribbon committee and presenting recommendations to the MSMA Council at the August meetings. The Council approved all recommendations of the committee and voted to support appropriate federal legislation, such as outlined in the Hatch Bill. Details of the Blue Ribbon Committee's report are available from component society offices, Councilors, Vice-Councilors, and MSMA Headquarters.

The bottom line is that, on the federal and state level, we must focus on the aspects of malpractice and tort reform that will translate into fewer malpractice suits, decreased premiums, and less defensive medicine. Risk management must be given as much attention as tort reform. Tort reform must be analyzed piece by piece for its impact on premium reduction. Less costly but fair alternatives to jury trial should be studied. Above all, the two-year statute of limitations must not be sacrificed in the interest of appearing to be doing something. Only with fewer suits, decreased premiums, and less defensive medicine will the general public have a chance to benefit from decreases in the rise of that portion of health care costs related to very high medical liability insurance premiums.

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1. Missouri Division of Insurance Statistical Section. *Missouri Medical Malpractice Insurance Report* 1989-1989. September 1990.

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AUXILIARY MESSAGE

by June Olson
MSMF Chairman

> *In Missouri we have the opportunity to participate in a unique program that allows us to invest in the future of medicine — the* **Invest In Missouri Program**.

Investing in Future Doctors

The Missouri State Medical Foundation, founded in 1960, is a program set up to help medical students pay for medical school through low interest loans. Since its establishment, the Foundation has received more than $2,800,000 from Missouri physicians, and more than 2,600 loans have been granted.

To qualify for a Missouri State Medical Foundation loan, a student must be a full-time attendant of an accredited medical school in the United States. The student must be working toward a medical degree and must have successfully completed one year at the school. Students in the six-year medical school programs are required to have successfully completed the first two years of the program. The majority of students granted loans attend one of the four medical schools in Missouri. The tuition for these schools range from $7,000 to $18,000 per year. Only Missouri residents who are members of the MSMA are eligible for Foundation loans and the decision to grant a loan rests with the MSMF Loan Committee. Loans are made on the basis of financial need with consideration for the student's background, references, academic achievement and other factors.

The Foundation and the assistance that it provides are made possible through an annual assessment from the MSMA members and donations throughout the year from MSMA auxilians and others who wish to aid deserving medical students from Missouri.

A new endeavor for raising MSMF funds called the **Invest In Missouri Program** was developed last year. The program briefly works this way: a minimum $5,000 investment is required. The money is used to buy an insurance annuity that will provide an annual check during retirement and an immediate, partial tax deduction. The remainder is given to the Foundation for loans and scholarships.

With the average medical student graduating with an average indebtedness in excess of $35,000, our help is essential. In the past the default rate has been extremely low at about 1%. With strong participation in the **Invest in Missouri Program**, as well as other fundraisers, the future of these loan programs will be bright. The key now is involvement — so please plan to invest in the future of Missouri doctors. ■

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PRACTICE MANAGEMENT

by Janice K. Woerth, Ph.D.

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Although your name will not be used in the journal, please include your name and phone number so that Dr. Woerth may contact you if she needs additional information to answer your question.

Dear Dr. Woerth:

Occasionally the doctor hospitalizes a patient for observation. Medicare will not reimburse us when we use the codes for hospital care for these patients. Which codes should I be using?

C.H.

Dear C.H.:

According to the 1990 CPT book, the appropriate code to use for patients who are hospitalized for observation are the Office and Other Outpatient Medical Services codes found on page 6. The physician should charge for the appropriate level of services he/she performed. The Hospital Inpatient Medical Services, Initial Hospital Care, are used when the patient is admitted to the hospital.

Dear Dr. Woerth:

I treat several family members who are Medicare patients. Medicare will not allow a physician to charge for services rendered to immediate family. Could you explain Medicare's definition of immediate family?

Dr. F.M.

Dear Dr. F.M.:

In September of 1990 new regulations were established that define the immediate family as follows:

- husband and wife;
- natural or adoptive parent, child, and sibling;
- stepparent, stepchild, stepbrother, and stepsister;
- father-in-law, mother-in-law, son-in-law, daughter-in-law, brother-in-law, and sister-in-law;
- grandparent and grandchild; and
- spouse of grandparent and grandchild.

The new regulations go on to say that "a step-relationship and an in-law relationship continues to exist even if the marriage upon which the relationship is based terminates through divorce or through death of one of the parties."

Your billing staff needs to be aware of Medicare's definition of immediate family so that they bill Medicare for those eligible family members (cousins, aunts, uncles, etc...).

Dear Dr. Woerth:

I've heard that Medicare is replacing the MAAC (Maximum Allowable Actual Charge) for non-participating physicians. Can you tell me more?

Dr. J.D.

Dear Dr. J.D.:

You heard correctly. The MAAC is being replaced by the limiting charge. The limiting charge applies to unassigned claims and in 1991 and 1992 is specific to each physician.

To determine your limiting charge for 1991, calculate the percentage that your 1990 MAAC exceeded the 1990 prevailing charge. Both the MAAC and the prevailing charge for non-participating physicians are listed on the physician's 1990 Medicare profile. The 1991 limiting charge can be determined by multiplying the 1991 prevailing charge by the percent that your 1990 MAAC exceeded the non-participating 1990 prevailing charge or by 25%, whichever is less, and by adding that amount to the 1991 non-participating physicians prevailing charge.

This seems confusing but take heart! Medicare will provide you with a profile that includes the calculated limiting charge and the 1991 non-participating physicians prevailing charge. You will not have to calculate your limiting charge. ■

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For Your Information:

Prescription Drugs and the Elderly

Thanks to modern medical development, today's elderly live better quality lives than did those of a century ago. In recent years, however, scientists have discovered that many factors can cause prescription drugs to interact differently with elderly individuals as compared to the general population. Some of what we attribute to just "growing old" may be drug-related or drug induced side effects.

The "aging" of society has brought many changes to the practice of medicine and the physician's perception of the elderly. One hundred years ago, 2% of Americans were over the age of 65, as compared to 11% today. In the year 2030, 20% of our population will be over 65. In fact, Americans over 65:

- buy 25% of all prescriptions sold;
- spend 30% of the federal health budget on prescription drugs, as well as 20% of their personal incomes; and
- take, on the average, 13 different prescription drugs per year.

Older Bodies Are Different

Diseases in the elderly can be complicated by many factors, such as those listed here.

1. As people age, they accumulate many "insults" to the body. By the time we reach age 65, our bodies have weathered numerous illnesses and injuries, and these old health problems may aggravate a new problem.

2. Diseases in the elderly tend to be more compound, complicated, and caused by more than one problem. A reversible disease in a young person may only be partially reversible in an elderly person. Geriatric diseases tend to be related to a variety of factors (physical, emotional, socio-economic) with more possible complications. Diseases may present in an atypical fashion, or affect numerous organ systems.

3. The elderly have an increased potential of complications resulting from any medical or surgical intervention. Risks of side effects, infection, or surgical and anesthesia-related complications are always higher in elderly patients.

4. Changes caused by aging often affect the way elderly bodies tolerate drugs. Decreased absorption from an aging digestive tract, decreased metabolism, decreased kidney and liver function, or changes in body muscle and fat composition all play a role in drug absorption rates. In addition, changes in the aging brain increase the likelihood of psychiatric and neurological side effects of drugs.

Miscommunication Can Be Fatal

Fifty percent of elderly patients do not take their medications as prescribed. Pills of similar shape and color are easily confused. Patients taking large numbers of pills may forget a dose. Instructions may be misunderstood because of poor communication between physician and patient. Whatever the reason, 25% of these errors result in drug-induced illnesses, decreased drug effectiveness, or potentially avoidable side effects. Some of these errors can, and do, kill.

For Your Information — Prescription Drugs and the Elderly

Strategies for Using Drugs Properly

The guidelines below list good advice for all patients on prescription drugs, but especially address important issues for the elderly.

●Make a "master list" of every drug prescribed by every doctor who treats you. Record the name of the drug, dosage, instructions for use (including special instructions like before or after meals), and the reason the drug was prescribed. Record the prescribing doctor's name if drugs have been prescribed by more than one physician. Many patients see multiple specialists who may or may not know what drugs other physicians have prescribed. The "master list" allows physicians to prevent over-prescribing and drug-drug interactions.

●After starting a new drug or changing the dosage of an old one, watch for new problems or symptoms. Contact your physician if you experience:

—depression, hallucination, confusion, delirium, memory loss, or difficulty thinking.

—shaking, twitching, convulsions, dizziness or falls.

—loss of appetite, nausea, vomiting, or abdominal pain.

—bleeding or unusual bruising.

—constipation, diarrhea, difficulty urinating or loss of bladder control.

Assume any new symptoms after starting a new drug could be caused by the drug.

●Develop a system of administering drugs. Weekly "pill minder" pill holders are helpful. Always lay out the next day's medication beforehand and then store it in a safe place.

●Make sure all labels are readable. If the print is too small, color-code the caps or place oversized print labels on the bottles.

●Always bring your "master list" when visiting the doctor. Go over the list with your doctor every time a change in medication is made.

●Any time a new drug is prescribed, ask about the side effects. Anticipating these effects can help keep your doctor more aware of drug-related problems.

●Make sure a friend or family member has a copy of your "master list" and knows the instructions for each drug. When new drugs are added, make sure this person understands the instructions, too. Never leave the doctor's office until you fully understand the instructions.

●Discard all outdated or discontinued drugs.

●Know what over-the-counter drugs cannot be taken with your prescription medication. Check the warning labels on all over-the-counter drugs before using. Call your physician if you are unsure about taking an over-the-counter drug.

●Keep a list of drug allergies. Individuals with severe drug allergies or chronic diseases such as diabetes should carry a medical alert card or wear some sort of medical alert bracelet or "dog tag."

Good communication between patients and physicians not only helps elderly patients, but helps physicians better care for them.

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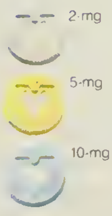
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Dysplastic Nevus Syndrome: A Review

John D. DeSpain, M.D., and **Imelda Bulatao, M.D.**
Columbia, Missouri

Dysplastic nevi in most instances have distinct clinical features and characteristic histopathologic findings. These lesions are not uncommon, and their clinical implications vary with the patient's personal and family history of similar nevi and of melanoma.

The B-K mole syndrome was first reported at the December 1976 meeting of the American Academy of Dermatology, heralding a fascinating and controversial problem for many practicing clinicians.[1] Wallace Clark and his co-workers described a group of patients who had distinctive melanocytic nevi and whose families had histories of melanoma. Their report documented that two individuals developed melanomas in the sites of pre-existing atypical moles; thus, the concept was born that these nevi are both markers for melanoma risk and potential precursor lesions. Prior to this landmark article, patients with a strong family history of melanoma had been noted to have many nevi, some of which were clinically and histologically atypical. The B-K mole syndrome (the name was derived from the surnames of two affected families) soon became known as the dysplastic nevus syndrome. Very quickly, similar moles were noted on other patients with a personal or family history of melanoma, but more commonly on patients without such a history. What was originally described as a rare syndrome afflicting a very minute group of patients became a nightmare of classification and treatment for virtually all dermatologists and pathologists.

We still lack important data about the true incidence and clinical implications of dysplastic nevi. This ignorance has led, unfortunately, to some physicians becoming stalled in debate about the term "dysplasia." We suggest that the dysplastic nevus is an important and distinct clinical and pathological entity, and that its significance, and therefore its management, depends on a given clinical situation.

The term dysplasia customarily refers to abnormal tissue development (such as a congenital anomaly), and has been criticized as an inappropriate term for acquired aberrant growth or cytologic atypia.[2] However, this usage is entrenched in general pathology, such as in describing the disordered and premalignant epithelial lesions of the cervix and the gastrointestinal tract. It is unfortunate that an ambiguous term has been associated with these already controversial nevi. It has been proposed that we replace the term with "atypia," or more specific histologic descriptive terms, and that the term "dysplastic" be reserved for describing the clinical characteristics of these nevi.[3] Until there is universal agreement upon the terminology, certainly the most recognized word for disordered melanocytic growth is "dysplasia."

The earliest reports of dysplastic nevi characterized these lesions clinically as macules, or as papules upon a larger macular component, being typically larger than 10 mm, having an irregular outline, an ill-defined border, and having a variably colored mixture of tan, brown, black, and pink (Figs 1 & 2). Experience has shown, however, that these atypical lesions may be as small as a few millimeters, have a range of clini-

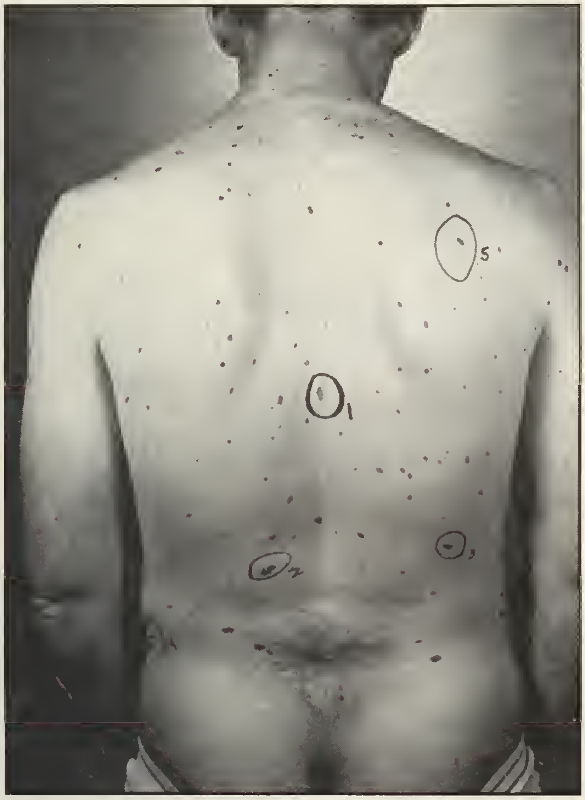

Fig. 1. Dysplastic nevus syndrome patient (Type C) with numerous large, irregularly shaped and colored nevi, most notably involving the trunk and scalp.

Table 1
Frequency of Clinical Features of Dysplastic Nevi

Ill-defined border	90%
Irregular pigmentation	84%
Diameter more than 5 mm	72%
Erythema	68%
Pebbled surface	63%
Irregular border	47%
Foci of black pigment	11%

Adapted from Kelly JW, Crutcher WA, Sagebiel RW: Clinical diagnosis of dysplastic melanocytic nevi. *J Am Acad Dermatol* 1986;14:1044-1052.

cal appearances, and may be clinically indistinguishable from melanoma.[4] One large study reported prevalence rates of specific clinical features in histologically proven dysplastic nevi. Ill-defined margins and irregular pigmentation were the most frequent findings.[5] Dark pigmentation correlated with more severe histologic dysplasia; that is, the more the lesions resembled melanoma, the more likely they were severely dysplastic or melanoma in situ (Table 1). Dysplastic nevi are acquired lesions, generally first appearing in adolescence, and are most common on covered areas, such as the trunk, proximal upper extremities, and scalp. Some patients have many nevi, while others may have only a few moles. An interesting case report describes a 31-year-old man with familial dysplastic nevus syndrome who had all his nevi (more than 150) removed, with intent of prophylaxis from melanoma.[6] He developed many new nevi, dysplastic and bland, over the next seven years, and the authors concluded that the removal of all nevi to prevent melanoma was futile. Dysplastic nevi are often active lesions, and large-scale serial photography has documented enlargement and darkening of the lesions, as well as regression.

The diagnosis of a dysplastic nevus requires histologic documentation. Two or three of the patient's most clinically atypical lesions should be completely removed for histologic evaluation, either with excisional or deep "disk" shave biopsy technique. Junctional nevus cells may extend beyond the apparent margin of the nevus, so we recommend a 2-3 mm clinical margin of excision. Because dysplastic features may be focal, a punch or other small incisional biopsy may be inadequate.

Despite their appearance, some clinically atypical nevi prove to have bland histology. In a large community-based study, the histologic findings confirmed a clinical diagnosis of dysplasia in three-fourths of the cases.[5] The clinical identification of nevi with mild and moderate histologic dysplasia is difficult, but lesions appearing most atypical usually prove to be severely dysplastic or melanoma in situ.

The histopathologic criteria defining a dysplastic nevus are (1) aberrant melanocytic growth, (2) host response, and (3) melanocytic atypia[7] (Table 2). Specifically, aberrant growth is lentiginous hyperplasia of the epidermal rete ridge pattern. The junctional nevus cells are not restricted to the tips and sides of the rete ridges, but extend horizontally along the basal layer and to adjacent rete ridges. This hyperplasia of melanocytes leads to fusion of adjacent nests. The host response manifests as a lymphocytic inflammatory infiltrate in the papillary dermis, and there are coarse eosinophilic collagen bundles beneath elongated epidermal rete. Neovascularization may be noted in the pap-

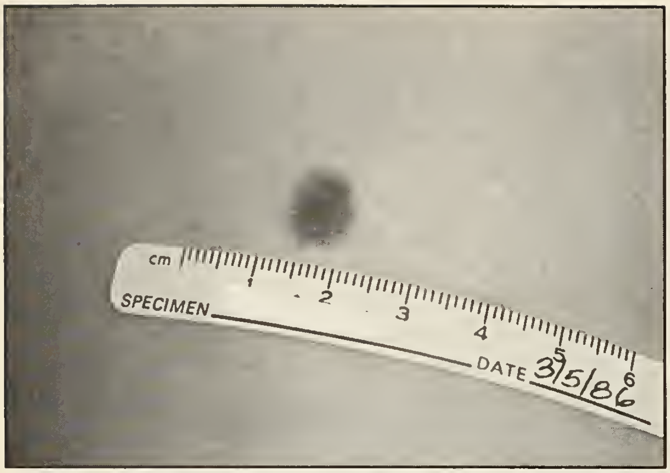

Fig. 2. A dysplastic nevus is characterized by irregular shape and coloration, has indistinct borders, and is often relatively large.

Table 2
Histologic Features of A Dysplastic Melanocytic Nevus

- Aberrant growth of junctional melanocytes
- Host response (lymphocyte infiltrate, lamellar fibroplasia, neovascularization)
- "Random" cytologic atypia

illary dermis. Some of the melanocytes are cytologically atypical and pleomorphic. The atypical melanocytes often have irregular, hyperchromatic nuclei, prominent nucleoli and may have generous "dusty" cytoplasmic melanin (Figs 3 & 4). Junctional dysplasia may coexist with a bland junctional, compound, or intradermal nevus. These same histologic criteria were carefully described in the earliest reports, and were recently restated by Clark and other investigators.[1,7,8]

The current confusion has evolved because many common nevi have some of the histologic features of a dysplastic nevus. One large study claimed a very high prevalence of dysplastic nevi, allegedly more than 50% of all excised moles.[9] However, these lesions had only some of the histologic features characteristic of a dysplastic nevus, such as disordered growth or host response, but lacked cytologic atypia. The majority of studies providing relative risk data have used a diagnosis of dysplastic nevus syndrome only if lesions, usually at least two, had characteristic histology as suggested by Clark: that is, aberrant intraepithelial growth, host response, and melanocytic atypia.[7,10,11] The significance of one severely dysplastic nevus, or of several lesions with only low grade dysplasia, is unknown and purely speculative.

A practical and reproducible scheme has been suggested by Richard Sagebiel, who differentiates between low grade and severe dysplasia.[12,13] Low grade dysplastic nevi are characterized by minimal histologic features, or focal changes at the edge (or shoulder) of the lesions. These lesions may have architectural features common to dysplastic nevi, but cytologic atypia is minimal or absent. Nevi with so-called low grade dysplasia are not uncommon and in some studies compose up to 50% of all nevi excised (clinically bland or atypical). Low grade dysplasia is of questionable biologic significance. In contrast, severe dysplasia is characterized by the presence of all the stated criteria of a dysplastic nevus: aberrant growth, appreciable host response, and significant melanocyte atypia. Severe dysplasia differs from melanoma in situ, the latter having a pagetoid growth pattern and more extensive atypia (Figs 8 & 9). Occasionally, lesions are borderline, in that a definite distinction between severe dysplasia and melanoma in situ is impossible. In these cases, treatment as a thin melanoma seems prudent.[14]

The melanocytes in several dysplastic nevi and melanoma are morphologically similar, and have been shown to share common immunohistochemical markers.[15] They also have nuclear DNA abnormalities and a melanosome ultrastructure which closely resembles cells of melanoma and not bland nevi.[16-17] Fibroblasts and lymphocytes from dysplastic nevus syndrome patients are hypermutable and show chromosomal instability.[18] Similar studies have not been performed with patients who have sporadic dysplastic nevi.

Most authors suggest there is a multi-step, progressive sequence in the pathogenesis of melanoma, and many interpret the dysplastic nevus as an intermediate step in this sequence (Table 3).[19] It is important to recognize, however, that lesions at each stage may regress, remain stable, or progress; that is, each stage is not an obligate precursor to the next stage. A dysplastic nevus is not an obligate precursor of melanoma. The available data suggest that the large majority of dysplastic nevi are dead-end lesions which either remain static or regress.[6,7,18]

The medical literature supports the idea that most melanomas do not arise from a precursor nevus.[20] As many as two-thirds of patients with mela-

Table 3
Histogenesis of Melanoma

Phases of Development	Characteristics
Phase 1: melanocytic hyperplasia	Growth-pattern atypia; no cytologic atypia
Phase 2: melanocytic dysplasia	Atypical melanocytic hyperplasia (cytologic and growth-pattern atypia) Stromal reaction (lamellar fibrosis, vascular proliferation, lymphocytic infiltrate)
Phase 3: melanoma-in-situ	All the features of melanoma except dermal invasion
Phase 4: invasive melanoma	
Phase 5: metastatic melanoma	Satellite lesions; Lymph node metastasis; Visceral metastasis

Reprinted with permission from: Santa Cruz DJ: Skin, in Henson DE, Albores-Saavedra J (eds): *The Pathology of Incipient Neoplasia*, Philadelphia, WB Saunders, 1986, pp 5-30.

noma state that their tumor arose within a preexisting "mole," but what is perceived as a nevus may be the radial growth phase of melanoma. Histologic studies have shown a coexisting nevus in only 20%-40% of melanomas, and features of a dysplastic nevus have been reported in about 20% of melanomas. Additionally, serial photography documents that most melanomas arise from normal skin in patients with the dysplastic nevus syndrome.

A large Australian study of melanoma patients and their families reported that 13% of patients with melanoma had at least two dysplastic nevi (fulfilling Sagebiel's criteria for severe dysplasia) and that about 5% had familial dysplastic nevi.[21] About 27% of the patients with a family history of melanoma or multiple melanomas had dysplastic nevi. Familial dysplastic nevi without a family history of melanoma were uncommon. While dysplastic nevi and especially familial dysplastic nevi are associated with melanoma, the evidence suggests that dysplastic nevi are not obligate precursors of melanoma, that most patients with melanoma do not have dysplastic nevi, and that not all melanomas arise from any type of melanocytic nevus.

A classification scheme has been suggested to assist in grouping and managing patients with the dysplastic nevus syndrome, defined by documentation of Clark's histologic criteria (Table 4).[10] Type D-2, that is, rare patients with familial melanoma and dysplastic nevi, have been calculated to have a 148- to 500-fold relative lifetime risk for melanoma, meaning that all such patients will develop melanoma if they live long enough. Type D family members who are themselves without dysplastic nevi do not seem to be at increased risk for melanoma.

The risk for other patients in the classification is more problematic. When observed in the nonfamilial setting (Type A), dysplastic nevi have been referred to as "sporadic." Most authors state that about 5%-8% of the white adult population have dysplastic nevi, but obviously the histologic definitions of dysplasia are varied. Case reports do not give evidence of risk because these cases were selected for publication because of the occurrence of melanoma in that setting. Crude estimates have suggested that the sporadic form of the syndrome confers anywhere from a 5- to 27-fold relative risk for melanoma as compared to the population at large.[7,21] The relative risk is illustrated, for comparison, with nine other recognized risk factors for cutaneous melanoma as presented in a recent article by Rhodes and co-workers.[22] Finally, as stated previously, the relative risk of low-grade dysplasia is unknown, but available data make any association of melanoma with these common lesions extremely unlikely.

The management of patients with the dysplastic nevus syndrome has been extensively reviewed in recent years, and was summarized by Clark in a recent editorial.[7] The estimated risk for melanoma is based upon the presence or absence of a personal or family history of melanoma, and whether other family members have dysplastic nevi. Yet family histories are unreliable, especially regarding the presence of unusual nevi; therefore, family members must be examined and

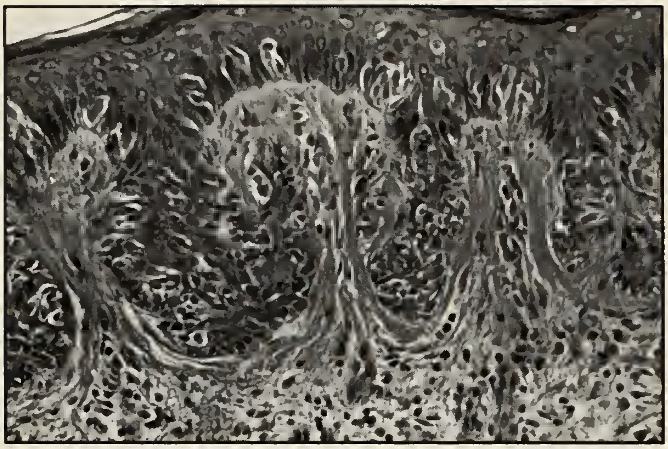

Fig 3. Lentiginous melanocytic dysplasia in dysplastic nevi. Note the striking host response, i.e. lamellar fibroplasia about elongated rete ridges and lymphocytic infiltration.

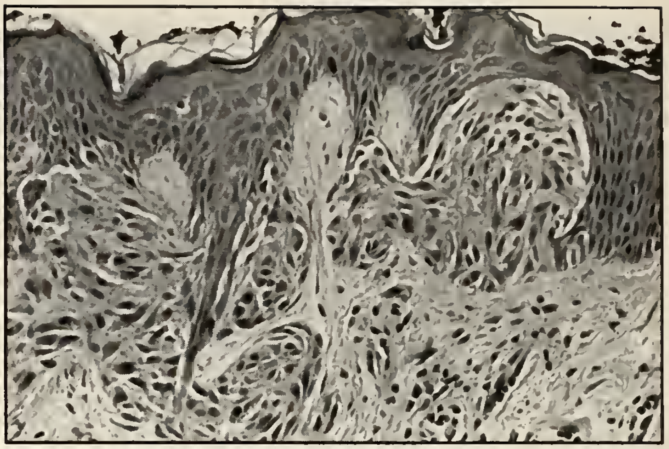

Fig 4. Epithelioid cell dysplasia in dysplastic nevi. Nested epithelioid melanocytes contain abundant dusty melanin pigment and coalesce with an adjacent nest.

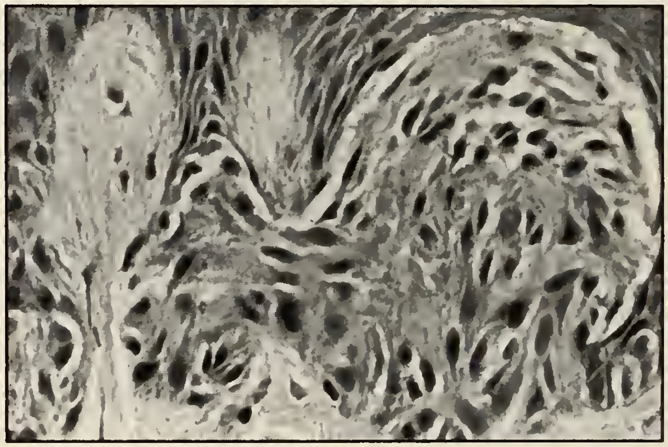

Fig 5. Cytologic detail of dysplastic melanocytes: nuclear pleomorphism and hyperchromatism.

the pathology reports from any previously removed pigmented lesions should be reviewed. Only with this information may the significance of the patient's mole (or moles) be estimated. Many sources are available for patient education and counseling, with emphasis upon self-examination, recognizing the signs of early melanoma, and limiting sun exposure. The patient should be seen on a regular basis and thoroughly reexamined for atypical pigmented lesions. Low-risk patients should be seen once every one or two years, while patients with dysplastic nevi and a history of familial melanoma probably should be examined at three to six month intervals. Patients who detect an alarming lesion should, of course, be seen quickly. Once a diagnosis of the dysplastic nevus syndrome is made, lesions suspicious for melanoma should be excised. The removal of dysplastic nevi with the intent of melanoma prophylaxis is not recommended, for the reasons previously discussed. Recently, ocular melanoma has been associated with the dysplastic nevus syndrome; periodic ophthalmologic examination is recommended.[23]

Photography has been advocated as one aid to detect new or changing lesions. A standard approach, such as that designed at New York University, is optimal and may certainly help in managing the uncommon patient with rapidly changing or florid dysplastic nevi.[24] The expense, practicality, medical, legal and record-keeping issues of such photography are frequent topics of debate. We recommend that total body photographs be reserved for complicated patients with abundant dysplastic nevi or for those who have the familial dysplastic nevus syndrome with melanoma.

A common concern regarding the biopsy of a dysplastic nevus is how one should deal with positive microscopic margins. A severely dysplastic nevus should be completely excised, and if the margins of the biopsy specimen prove to be involved, a conservative re-excision is recommended. If the excised nevus shows low-grade histologic dysplasia, re-excision of positive microscopic margins is generally not recommended. These nevi have the same risk for recurrence as common moles.

An isolated, severely dysplastic nevus is of unknown risk, as is the common nevus that shows some of the growth features of a dysplastic nevus but lacks cytologic atypia. It is inappropriate to classify these patients as if they had the dysplastic nevus syndrome, or to manage them as such. Admittedly, more data regarding these patients are needed. One should certainly take the opportunity to counsel

Table 4
Classification Scheme for Dysplastic Nevus Syndrome

Type	Criteria		Incidence	Melanoma Risk
A	Neg Neg	FH DNS/melanoma PH melanoma	Relatively High	Relatively Low
B	Pos Neg	FH of DNS PH/FH of melanoma	↓	↓
C	Neg Pos	FH DNS/melanoma PH melanoma	↓	↓
D-1	One Family member w/DNS and melanoma		↓	↓
D-2	Two or more Family member(s) w/DNS and melanoma ("B-K" mole syndrome)		Rare	Highest Risk

DNS = Dysplastic Nevus Syndrome
FH = Family History
PH = Personal History

Source: Greene MH, Clark WH, Tucker MA, et al: Acquired precursors of cutaneous malignant melanoma: The familial dysplastic nevus sydrome. *N Eng J Med* 1985;312:91-97.

these patients to report changing or new pigmented lesions and to avoid excessive sun exposure.

In conclusion, the dysplastic nevus syndrome is a distinct clinical and pathologic entity. Both the original description and the bulk of data that associate melanoma risk with dysplastic nevi are based upon a histologic definition of dysplasia, characterized by abnormal melanocyte growth, host response, and cytologic atypia of the melanocytes. Lesser histologic features have been frequently observed in clinically bland and atypical nevi. The biologic significance of so-called "low grade" dysplasia is unknown, and there is no data to support grouping these patients with dysplastic nevus syndrome patients. In the setting of familial lesions, and especially those with a history of melanoma, the dysplastic nevus is an important marker of increased risk for cutaneous malignant melanoma.

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Reprints

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Plastic and Reconstructive Surgery in the Dominican Republic

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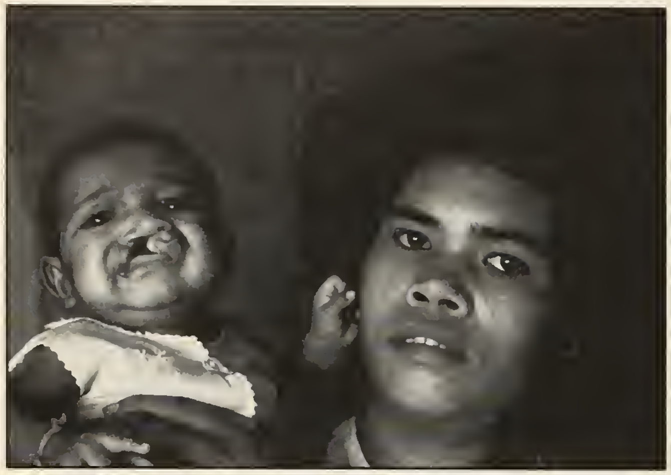
The authors describe the work of a group of Kansas City physicians and nurses who, for the past six years, have packed up their equipment and taken their skills to the Dominican Republic to provide some much needed medical care.

For the past six years, a group of Kansas City physicians and nurses has packed its surgical greens and operating room supplies and headed for the Dominican Republic to spend one or two weeks providing plastic and reconstructive surgery to the people of that country. The program also provides plastic surgery residents with experience in cleft lip and palate repair and other reconstructive procedures. Over the years, the program has become a surgical adventure, testing the skills and resourcefulness of team members as they work to provide quality reconstructive surgery to the population of a third world country. During these six annual trips, the Kansas City group has completed 474 reconstructive surgical procedures, including 173 cleft lip and palate operations (Figs 1a & b) and 88 primary and secondary burn procedures. The team has also assisted with more than 100 ophthalmological and general surgical cases and has treated more than 300 patients with other medical illnesses. Surgical results have been successful for the patients, and the gratification derived by the team members has been immense.

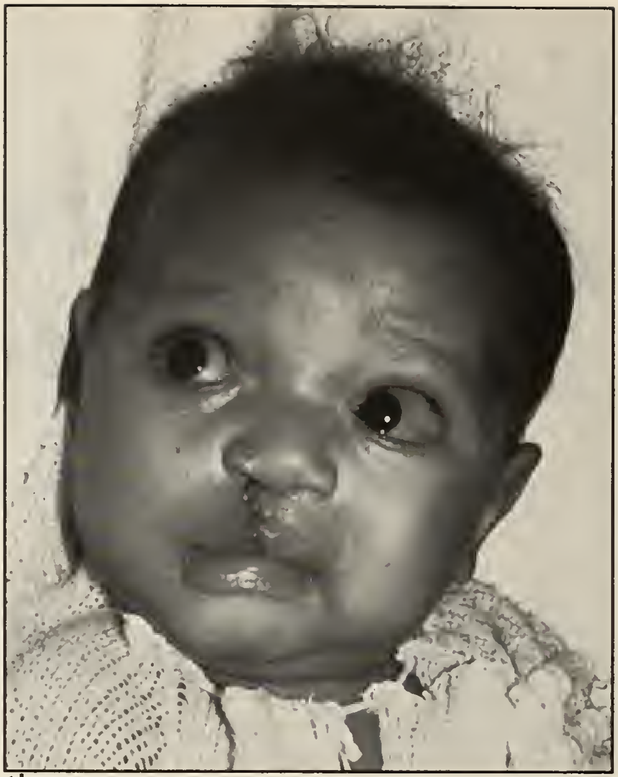
The Dominican Republic

The eastern two thirds of the Caribbean island of Hispaniola is occupied by the nearly 7 million people of the Dominican Republic. Haiti occupies the western third of the island. Discovered in 1492 by Christopher Columbus during his first voyage to the New World, Hispaniola is rich in history, especially as it developed into a seaport to the New World and the entire Caribbean.

The Dominican Republic became independent of Haiti in 1844, and between then and the assassination of the dictator Trujillo in 1961, the country suffered from mismanagement, governmental corruption and resultant economic problems. A democratic council of



Figs. 1a & b. A 5-month-old Dominican girl with her mother before and after her complete cleft lip repair.



1b.

state was set up in 1962; following a military coup and civil war in 1965, the United States was prompted to send armed forces to help stabilize the area. Since then, the country has been in a state of reorganization and normalization.

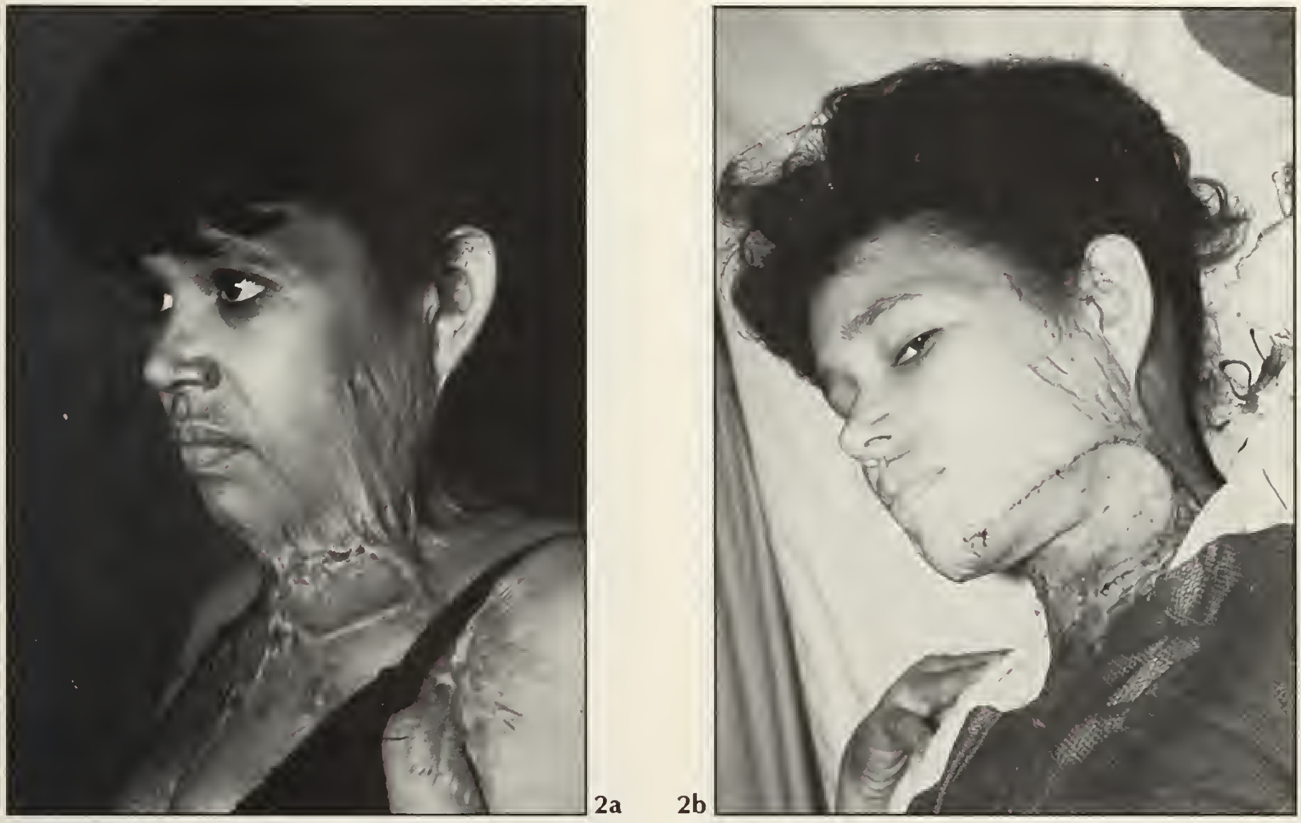
The government of the Dominican Republic has initiated many economic reforms, but with a national debt of more than $6 billion and an annual per capita income of less than $300, significant changes in the standard of living are unlikely in the near future. The Spanish-speaking citizens are of mixed ethnic heritage and 90% are Roman Catholic. The country's greater than 10%[1] infant mortality rate is one of the highest in the western hemisphere, and it is estimated by foreign health workers that more than half of the people are undernourished.[2] Even with these economic and social burdens, the Dominican people are exceedingly generous and have unending hope and courage.

The Elias Santana Hospital, headquarters for the Kansas City surgical mission, is located near the capital city of Santo Domingo near the barrio of Los Alcarrizos. Most of the residents work in agriculture, the main products being sugar cane, coffee and pineapple. The residents of the local hospital area live in small huts with no plumbing. Water is carried to houses in five gallon cans, balanced on the heads of the women and children. Sewage and trash are dumped in ravines by the roadside and along railroad tracks, where it is burned. Although electrical service is erratic with frequent blackouts, many of the dirt-floor homes have electricity and television. Traffic on the island is an amazing free-for-all.

The Elias Santana Hospital is a private facility offering primarily outpatient services. The hospital is sponsored by the Christian Medical and Dental Society, a 7,000-member group based in Richardson, Texas. Janice and Willie Hunter are the organizational heads of the society's medical group missions throughout the world and manage the hospital's operation. The hospital is not equipped for complex inpatient care and lacks the capacity for X-rays and acute care of cardiac, pulmonary and traumatic problems, but it is the cleanest and most efficiently run facility in the country. The hospital is a well-designed cinder block building with large open-air waiting rooms, two small and congested operating rooms with two operating tables per room, an overnight inpatient ward, and multiple examination rooms where ophthalmological and general medical patients are seen.

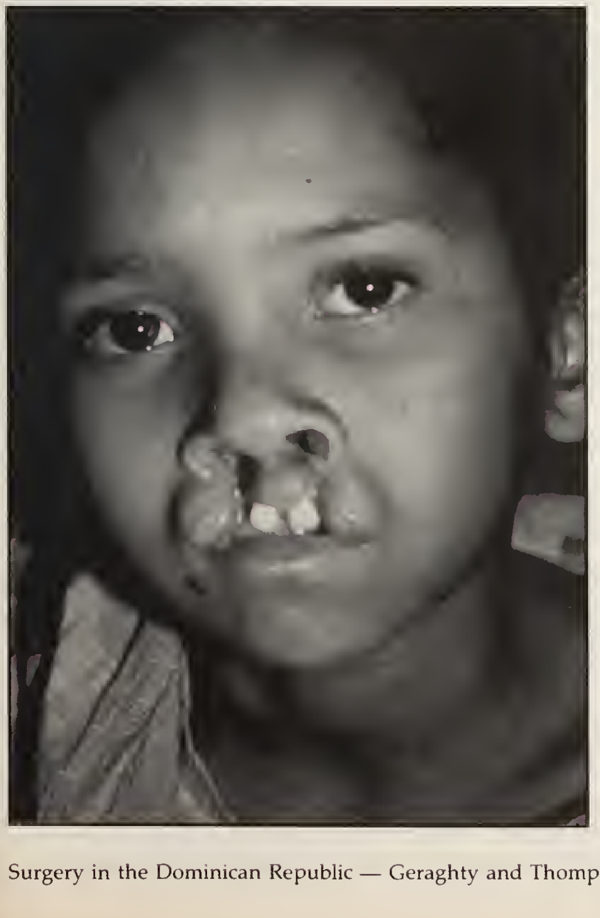
A growing and successful ophthalmology residency program in the hospital has received international attention and is headed by Dr. Juan Batlle, a Dominican physician and surgeon who received his training in the United States. More than 2,000 operations are performed in the facility each year, the majority being ophthalmological procedures. The medical, surgical and dental clinics have 60,000 outpatient visits annually.

When first established, the hospital was surrounded by sugar cane and pineapple fields, but in recent years, the growth of the local town, barrio and slum has completely encircled the facility. An estimated 250,000 people live in the local villages and towns within an hour's distance from the capital. On the eight-acre grounds are the hospital and clinics,

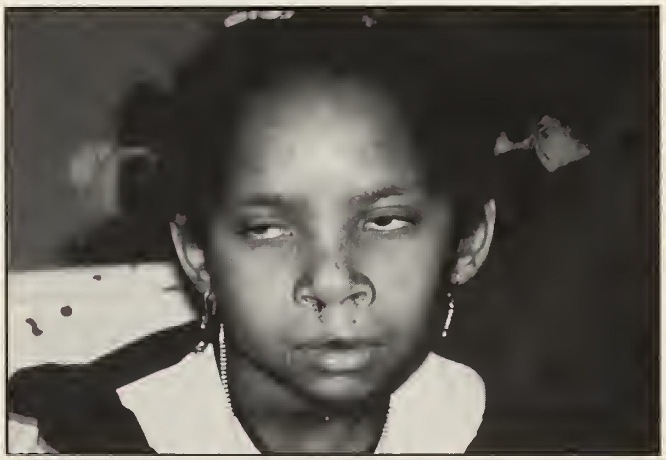


2a 2b

Figs. 2a & b. 28-year-old female before and seven days after a burn scar contracture release to her neck with split thickness grafts.



3a



3b

Figs. 3a & b. 8-year-old girl before and 10 days after a bilateral cleft lip repair.

storage facilities, outpatient nutrition classrooms, a library, offices and living quarters for the medical team. These quarters provide a clean and open atmosphere with six bunks per bedroom tended by several energetic Dominican women.

In addition to working at the Elias Santana Hospital, the team has also operated in the government hospital in the city of Las Matas de Farfan in 1985, as well as in the Robert Reid Cabral Pediatric Hospital in downtown Santo Domingo in 1989 and 1990. Although these facilities are ill-equipped, the surgical team has been able to adapt, bringing its own medications and equipment and sharing efforts with the Dominican plastic surgery residents and nurses. A cooperative effort with the only plastic surgical residency in the country has encouraged their staff and residents to treat patients at the Elias Santana Center on a weekly basis. Goodwill and trust between the Dominican and United States medical personnel have been established because of this effort.

The Surgical Team

Over these six years, member of the surgical team have consisted of 42 medical volunteers from the Kansas City area, two from the Lake of the Ozarks, three Texas residents and one Northwestern University resident. The team includes nurse anesthetists, anesthesiologists, operating and recovery room nurses, general and plastic surgery residents, a pediatrician and practicing plastic surgeons. The team is established months in advance and meets several times in the Kansas City area to prepare for the medical mission.

Plastic surgery residents and staff nurses from the Dominican Republic not only participate in the mission hospital and pediatric hospital in Santo Domingo but also help follow patients long-term. A new nursing school, established in 1989, has significantly increased the quality of care at the hospital.

The hospital has some supplies for its ophthalmology program but is always short on supplies for the medical and surgical missions. All items, including gowns, gloves, drapes, sutures, intravenous fluids, anesthetics, pharmaceutical agents, anesthesia machines and monitors, are sent to the hospital ahead of time or are hand-carried. Six anesthesia machines, in good working order, were donated by the group to replace the outdated and unreliable machines the hospital had.

Most supplies are donated by local Kansas City and Midwest hospitals, as well as local pharmaceutical and equipment representatives. Surgical instruments are transported with the team's luggage.

Delays in customs and government intervention are a potential problem, but the expertise of the hospital administration and members of the Christian Medical Society generally smooth the passage through the hectic airport customs.

The medical mission was funded by the Plastic Surgery Foundation of Truman Medical Center and Children's Mercy Hospital for its first two years. For the last four years, funding from many generous private donors in the Midwest has made the trip possible. Marion Laboratories, St. Luke's Hospital Foundation and two Kansas City law firms have been the largest contributors. The cost of air fare and accommodations are largely paid for by the medical team volunteers.

The entire mission has been a joint effort that has resulted in the establishment of a non-profit organization called Medical Aid for Children of Latin America. This has necessitated the creation of a local Kansas City Advisory Board composed of medical personnel and business community leaders.

The Peace Corps

A major part of the team's effort depends on the Peace Corps volunteers who identify the patients, transport them to the hospital, act as interpretors for the medical team, and occasionally remove sutures postoperatively. They participate in the patients' hospital care and provide personal continuity and trust for the patients and their families. Many of the volunteers have stated that this medical mission is one of the most important works in which they have participated during their two-year tenure.

Since it was founded by the Kennedy administration in 1961, the Peace Corps has established itself as a respected organization in Latin-American countries, especially the Dominican Republic. Volunteers provide resources for local improvements such as wells, sanitation, reforestation, water procurement, nutrition, and some basic medical care. The Peace Corps is the best foreign aid program that we have.[3] With democracy and freedom breaking out around the globe, the demand for Peace Corps volunteers is soaring. President Bush is committed to the agency, and his $16,000,000 budget increase (to $181,000,000) in 1991 is the biggest year-to-year jump the Peace Corps has received in more than 25 years.[4]

The federal government is interested in using more Peace Corps volunteers in medically related fields.

The Patients

The main sources of patient referral are the hospital and local health workers, the Peace Corps volunteers, and word of mouth. Some patients come from the immediate area, but most travel long distances, sometimes over rough country on burros, in buses and on motorcycles to reach the hospital.

On the first working day at the hospital, a clinic is held. During the clinic, 200 to 300 prospective patients are examined, photographed and scheduled for surgery over the following one or two weeks. Family and friends of the patients fill the outdoor waiting rooms. Hospital personnel and Peace Corps volunteers help interpret, direct patient movement and conduct preoperative education. The majority of the patients have cleft lip and palate deformities or burn scar contractures. Most surgical procedures are completed on an outpatient basis with follow-up in the clinic during the next several weeks.

Optimism for a surgical cure is high, but there are many disappointments on that first day. There are tumors too large to be excised, scar contractures that are too extensive to be improved and deformities too extreme to repair successfully. If a child is too weak, malnourished or of questionable physical status, the team will postpone surgery until the following year.

Overnight hospital stays are usually needed only for patients with cleft palate repairs, patients with extensive skin grafts, and the very young. Cleft lip and palate patients who spend the night of surgery at the hospital always have the family in attendance. Because the hospital has no kitchen, food is prepared and served by the patient's families. Patients who need long-term wound care and suture removal return to the hospital, are followed by the hospital physicians, or are helped by Peace Corps members in their villages. Many of the local and distant island physicians cooperate in the patients' postoperative care.

The patients and their families are expected to pay a small fee, ranging from 5 to 200 pesos (around $1 to $50), to the hospital for their surgery. Most of these funds are provided by the Kansas City surgical team, its donors, the Peace Corps, the American Embassy and local church groups. No one is turned away because of an inability to pay. Fees are necessary to avoid overtaxing the facility's limited resources.

Although it is not a standard practice in developed countries, all surgical patients receive prophylactic antibiotics for three or four days regardless of the type of operation completed. There have been only four known wound infections in the 474 cases. Because of the lack of sophisticated care for postoperative infection, this empiric practice appears justified.

Brief medical records are kept, including complete anesthetic and recovery room records and a description of the operation. This requires a minimum of paperwork and an adequate account of the care provided. There are no malpractice carriers, no malpractice suits, no joint commission reviews, and no insurance companies.

Types of Operations

The Dominican Republic harbors a vast backlog of work for the plastic surgeon. The diseases and deformities are numerous and profound. The majority of cleft lip and palate patients are not one to two years of age but rather school age and older, including eight adults over the age of 30. The incidence of these clefts does not seem higher than the United States, but there are simply not enough surgeons to take care of the problems. Other congenital deformities such as polydactyly, syndactyly, hemangiomas and other cutaneous growths are also common, but not as common as the cleft lip and palate problems.

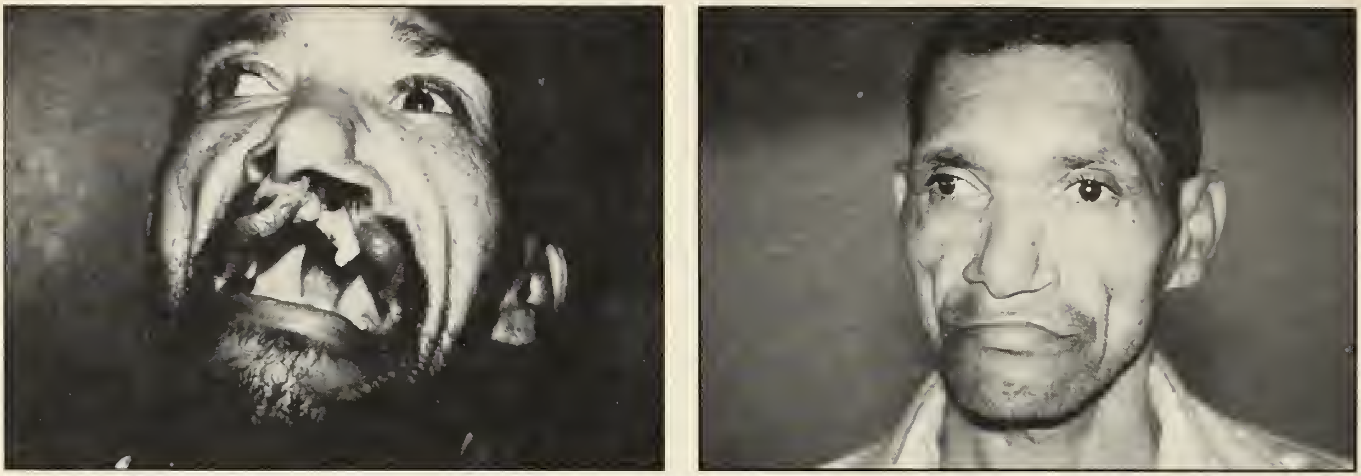
Burn scar contractures are generally immense and functionally debilitating. The thyroid nodule seen in the Dominican Republic is seldom a subtle, questionable lump evading the fingertips, but a huge mass in the neck that can be seen from the other end of the corridor. Nasal polyps are so large that they do not require a speculum for examination. Many injuries that would demand hospitalization, surgery and extensive recovery in the United States have been treated by family members with home remedies or by local rural health providers.

With the lack of natural gas, heating and cooking are done on kerosene stoves or over open fires. In rural areas, wooden huts catch on fire readily, burning the occupants severely. Ointments and home remedies may be the only treatment available, and contractures are the expected result. Contractures of the head and neck make anesthetic induction difficult, often requiring awake intubations and careful anesthetic administration (Figs 2a & b).

Since agriculture is the mainstay of the working man, old machete and farm implement injuries of the hand are abundant. Median nerves hurriedly sutured to flexor tendons at rural clinics are commonly seen for secondary repair.

Parasite and bacterial infections are endemic in the Caribbean.[5] Elephantiasis occurs with some regularity. Numerous mycobacterial infections of the lacrimal drainage apparatus presents as a chronic draining nasal lacrimal sac abscess causing tear duct obstruction. The team has completed 15 dacryocystorhinostomies for these problems.

Neoplasms are generally undiagnosed, untreated, far advanced, and beyond the capabilities of this small hospital's medical resources. Many melanomas and basal cell and squamous cell epitheliomas are resected without adequate pathological evaluation or frozen section biopsy.



Figs. 4a & b. 40-year-old male before and one year after a complete cleft lip and palate repair.

Discussion

The value of the medical mission to the Dominican Republic is indisputable for both the teams and the patients. For physicians and nurses, it is an opportunity to observe and learn about diseases and deformities in advanced stages not commonly treated in the United States. The impact of this mission on the local government and physicians is minimal. There are clear indications of the need for plastic surgery procedures on the poor, and there are not enough surgeons in the country to provide for these needy patients. The surgical team does not interfere with the practice of the local physicians, and the Dominican government rarely interferes with the hospital's undertakings because the Christian Medical Society has an excellent reputation on the island. Cooperation with the local residency training program, as well as the local government hospitals, has prevented any sense of competition.

Plastic surgery is a unique medical sub-specialty in that most results are immediate, and a cure for the vast majority of patients is permanent. This article cannot begin to catalog all the successes of the surgical team, but a few examples are noted.

During the first medical mission, the team treated an 8-year-old girl with a complete bilateral cleft lip and palate (Figs 3a & b) who lived in the mountains near the Haitian border. The child had never seen an electric light nor had she been to the city. The mother took the child out of the small village school as she was taunted by the other children because of her deformity. Her lip was repaired one year, her palate the next, and she subsequently became an outgoing leader in the school from which she had been removed.

A 57-year-old man presented with a basketball-sized lipoma on his back, so large he couldn't sit in a chair comfortably nor sleep on his back. In gratitude for resecting the tumor, he delivered six eggs to the hospital — a healthy payment for a poor man.

A reclusive 40-year-old farmer from north of the island was sent by a young Massachusetts Peace Corps volunteer who thought the man had an axe wound to his face (Figs 4a & b). Actually, he suffered from a complete cleft lip and palate deformity. His operations were completed over a two-year period. The man now attends church and visits the local village. He is no longer a recluse.

Conclusion

The realistic hope and goal of treatment for these plastic surgery patients is to restore them to the highest level of normalcy possible — physically, functionally and psychologically. Because the team has returned annually, it has established a long-term, mutual respect with staff and patients. All have learned to adapt, share, give and receive as a result of bringing medical skills to a third world country.

There are many reasons for being a medical volunteer, and they are best summed up by Dr. Bill Dolan, the program director of Esparanza, a medical missionary group based in Phoenix and practicing in South America. He recently stated at the April 1990 Third Symposium on International Voluntary Medical Services, "We're all God's children, and we're helping our world family. International health is the most potent diplomat for world peace."

Through the Christian Medical and Dental Society medical group missions, the process of expanding and fulfilling the medical and surgical needs in other third world countries is growing.[6] Through cooperative efforts, we hope to eventually turn the work over to the local medical communities so they can function autonomously. We also realize that there are more medical problems such as growth retardation, oral rehydration, breast feeding, immunization, and family planning that will not be solved. However, some of the basic life needs of these patients are met.

This medical team plans to return to the Dominican Republic and hopes to expand. This will require more money, equipment, supplies and medical volunteers. To expand your medical horizons you may contact the authors through Medical Aid to Children of Latin America in Kansas City, Missouri, the Medical Group Missions through the Christian Medical and Dental Society in Richardson, Texas, or the many medical missionary groups throughout the world.

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Reprints

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Catastrophic Hemorrhage As the Presenting Symptom of an Infratentorial Ependymoma

Thomas Pittman, M.D., Beth Levy, M.D.,
Eric Awwad, M.D., and **David Martin, M.D.**
St. Louis, Missouri

Children with posterior fossa ependymomas most often have slowly evolving signs and/or symptoms of intracranial hypertension or cerebellar dysfunction. Rarely, however, the tumor can cause a rapidly evolving, disastrous illness.

Ependymomas are common childhood tumors. They occur most frequently in the posterior fossa and usually cause slowly developing signs and symptoms of increased intracranial pressure or cerebellar dysfunction. We report the case of an apparently healthy 7-month-old child who suffered an apoplectic decline and died within hours from a large intratumoral hemorrhage; only seven such cases have been previously documented.

Case Report

A 7-month-old girl was brought comatose to the emergency room at Cardinal Glennon hospital. She had been in good health and acting normally until 3 to 4 hours prior to admission. Her mother said the baby had begun to cry and over a period of several minutes had become unarousable. There was no history of recent trauma. The parents had taken the child to a local hospital ER, where the baby was found to be breathing spontaneously but irregularly, with a systolic blood pressure of 70. She had mid-position, mimimally reactive pupils and responded to pain by flailing all of her extremities. She was immediately transferred to Cardinal Glennon.

On initial examination in the emergency room, the baby had bilateral extensor posturing and mid-position, non-reactive pupils; corneal and oculocephalic reflexes were not recorded. The child made occasional ineffective respiratory movements. She was immediately intubated and, after an intravenous line was placed and preliminary blood work was drawn, she was taken for a CT scan. Non-contrast CT scan of her head demonstrated a very large posterior fossa hematoma with rupture into the ventricular system and secondary hydrocephalus (Fig 1). Thereafter, the child was found to be flaccid with bilaterally fixed and dilated pupils and no brain stem responses. Less than 4 hours had elapsed since the ictus. The neurosurgery service was urgently consulted and a ventriculostomy was placed. The opening pressure was 30 mm Hg. Even with drainage and maximal medical treatment, the pressure rose uncontrollably over the next few hours. The baby never regained any neurologic function and died 18 hours later. Autopsy examination of the brain revealed a large hematoma associated with a tumor in the midline cerebellum. While the tumor mass measured 1.5 cm, the hematoma measured 7.0 x 3.5 cm, obliterated the fourth ventricle and cerebellar vermis, and compressed the brainstem ventrally. Microscopic evaluation determined that the tumor was an ependymoma with broad areas of necrosis associated with the recent hemorrhage, but with no evidence of malignancy (Fig 2).

Upon review of the pediatrician's records, it was seen that the child's head circumference had increased from the 30th to the 75th percentile over the several months preceding her admission. Her weight and length had increased concomitantly. Her neurological examination had been appropriate for her age. She had had no signs or symptoms of hydrocephalus nor other significant illnesses. There was no family history of brain tumors or unexplained childhood deaths.

Discussion

Clinically significant hemorrhage from brain tumors is uncommon. It is generally agreed that between 2% and 10% of intracranial tumors bleed.[1-5] If pituitary tumors are excluded, the incidence is slightly lower.[6] In adults the hemorrhages more commonly occur above the tentorium and more likely in a metastatic than a primary lesion. In children the hemorrhages are more frequently infratentorial and, because of the relative rarity of metastatic foci, occur more often into primary neoplasms.[6] In both groups a significant proportion, perhaps up to one-half of the tumor-associated hemorrhages, manifest themselves as subarachnoid, rather than intratumoral blood.[1,7,8,9]

Several authors have suggested that children are more likely to bleed from an intracranial tumor than are adults. Wakai et al reviewed 1,550 patients with brain tumors. The overall incidence of tumor-associated hemorrhage was 2.9%. The incidence was slightly higher in children (17/322=5.3%) than it was in adults (28/1288=2.3%).[6] Laurant et al found in a retrospective review that 10% of patients presenting to the Children's Hospital of Philadelphia with brain tumors had evidence of subarachnoid hemorrhage.[7] Comparable series including patients of all ages report much lower incidences.[8] It is not clear what predisposes childhood tumors to bleed, although their relative vascularity and the greater proportion of malignant tumors in children are possible explanations.

Even among patients who hemorrhage from their tumors, it is uncommon for a bleeding episode to occur as their initial complaint. Of the 26 patients in Wakai's study who had clinically significant hemorrhages, only 11 presented with an apoplectic intratumoral bleed. Of those 11, only two were younger than 14 years old.

Although the majority of tumors that occur in the posterior fossa in children may bleed, some types do so much more frequently than others. Choriocarcinomas, embryonal cell carcinomas, choroid plexus papillomas and metastatic lesions commonly bleed at some point during their course.[6] Ependymomas, on the other hand, very infrequently do so.

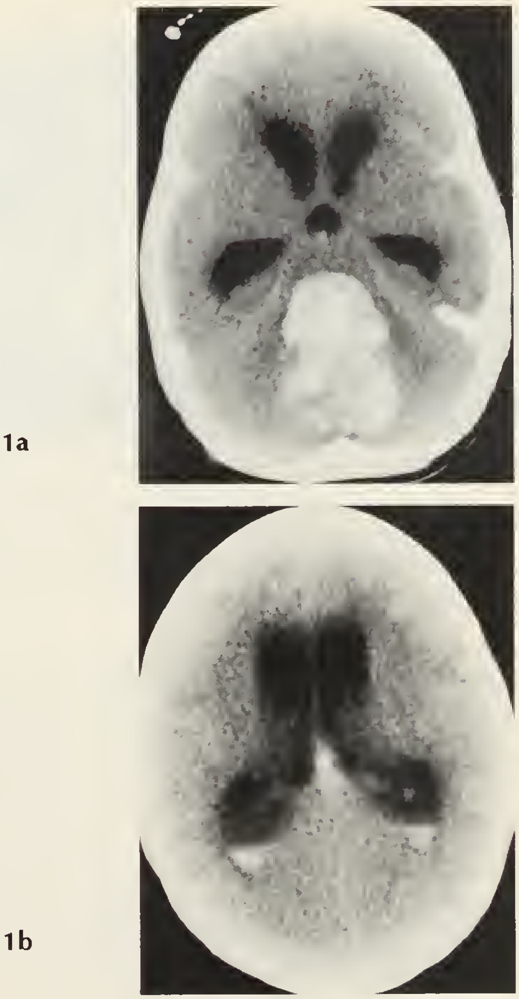

Fig. 1a & b. Noncontrast CF scans illustrating a large posterior fossa hemorrhage (a) with secondary hydrocephalus (b).

Children with posterior fossa ependymomas most commonly come to medical attention because of symptoms of increased intracranial pressure or cerebellar dysfunction. Most patients are symptomatic for a period of several months prior to presentation. Headaches, vomiting, diplopia, ataxia, and increasing head circumference are common complaints. Other children suffer episodic, often dramatic, symptoms such as transient blindness, opisthotonus, or paralysis; these problems may be related to intermittent tonsillar herniation. Catastrophic intratumoral hemorrhage, however, is rare. In a thorough review of the literature, Reichenthal et al were able to find only seven patients with posterior fossa ependymomas who presented with an apoplectic hemorrhage.[10] Two of the cases were from Wakai's review while the others had been presented as case reports.[11-14] The outcome for most of these patients was poor: four of the seven died. In none of the cases did it seem that knowledge of the diagnosis at presentation would have altered the outcome.

Intratumoral hemorrhage is an uncommon cause of an uncommon event: spontaneous posterior fossa

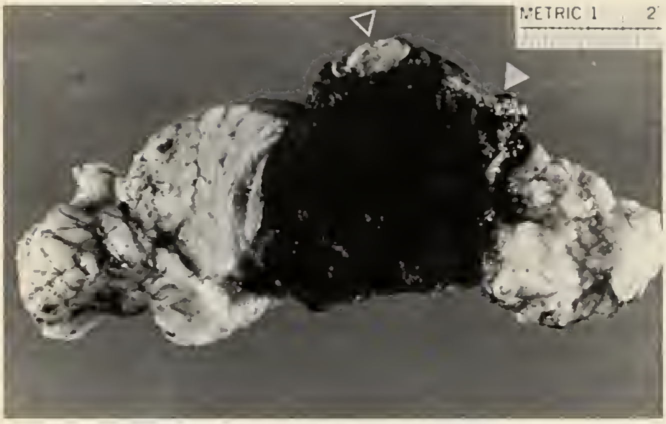

Fig. 2. Massive intratumoral hemorrhage resulted in formation of a large hematoma which obliterated the cerebellar vermis and fourth ventricle. Note remnants of the tumor at the perophery of the hematoma (solid triangle), and compression of the brainstem (open triangle).

hemorrhage in children. Arteriovenous malformation, hypertension, coagulopathies, vasculopathies, and a number of other diseases can present in this way. Differential diagnosis can be difficult and results less than satisfactory. While improvement in operative management may alter the outcome for these children, it would seem that recognition and treatment of subtle clinical signs or symptoms of posterior fossa involvement, if they are present prior to hemorrhage, will offer the best hope for these patients.

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1 **Prevention of Kidney Failure** — Location: Research Medical Center, Kansas City, MO. Contact: The Ed Bixby Institute for Postgraduate Medical Education, Research Medical Center, 2316 East Meyer Blvd., Kansas City, MO 64132. 1-800-892-5771, ext. 4306 or 816/276-4306.

6 - 8 **Peritoneal Dialysis Conference** — Location: Opryland Hotel, Nashville, TN. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

8 **Clinical Conferences in Otolaryngology/Head & Neck Surgery: Allergy and Otolaryngology: A Dynamic Interface** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712. or 314/577-8167.

8 - 10 **MAFP Young Physicians** — Location: Hilton Plaza Hotel, Kansas City, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212.

11 **5th Annual Daniel R. Biello Memorial Lecture** — Location: Mallinckrodt Institute of Radiology, St. Louis, MO. Contact: R. Gilbert Jost, Chief of Diagnostic Radiology, Mallinckrodt Institute of Radiology, 510 S. Kingshighway, St. Louis, MO 63110. 314/362-7130.

14 - 17 **Microsurgery of the Cerebellopontine Angle and Cranial Base** — Location: St. Louis University Medical Center, St. Louis MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

20 **The Joseph E. Flynn Lecture: Updates in Surgery** — Location: St. John's Mercy Medical Center, St. Louis, MO. Contact: Judith L. O'Guin, Corporate Meeting/Special Events Planner, St. John's Mercy Medical Center, 615 S. New Ballas Road, St. Louis, MO 63141. 314/569-6290.

21 - 22 **Advanced Cardiac Life Support Course** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

21 - 24 **Rhinoplasty** — Location: To be announced. Contact: Cathy Caruso, CME Office, Washington University School of Medicine, 660 S. Euclid, Box 8063, St. Louis, MO 63110. 1-800-325-9862 or 314/362-6893.

March

1 - 3 **Group Relations Conference** — Location: University of Missouri, Columbia, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

4 - May 20 **17th Annual Internal Medicine Review (Monday Evenings)** — Location: Steinberg Amphitheater, The Jewish Hospital, St. Louis, MO. Contact: Cathy Caruso, CME Office, Washington University School of Medicine, 660 S. Euclid Ave., St. Louis, MO 63110. 314/362-6893 or 1-800-325-9862.

8 **Preceptor's Day** — Location: University of Missouri, Columbia, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

8 - 9 **4th Annual Contact Lens Course** — Location: Washington University Medical Center, St. Louis, MO. Contact: Cathy Caruso, Washington University School of Medicine, CME Office, 660 S. Euclid, Box 8063, St. Louis, MO 63110. 1-800-325-9862 or 314/362-6893.

8 - 9 **Advanced Trauma Life Support Provider Course** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

9 - 10 **Family Practice Update** — Location: University of Missouri, Columbia, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

11 **City-Wide Radiology Conference: Fundamental Observations in Chest Radiology** — Location: Mallinckrodt Institute of Radiology, St. Louis, MO. Contact: R. Gilbert Jost, M.D., Chief of Diagnostic Radiology, Mallinckrodt Institute of Radiology, 510 S. Kingshighway, St. Louis, MO 63110. 314/362-7130.

15 **Clinical Conferences in Otolaryngology/Head & Neck Surgery: Endoscopic Sinus Surgery** — Location: St. Joseph's Hospital, St. Charles, MO. Contact: St. Louis University CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712 or 314/577-8167.

22 **Ninth Annual Symposium on Geriatric Medicine** — Location: Breckinridge Frontenac Inn, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

April

4 **In Vivo Magnetic Resonance Spectroscopy IV** — Location: The Ritz-Carlton, St. Louis, MO. Contact: Radiology Postgraduate Education, Room C-324, University of California School of Medicine, San Francisco, CA 94143. 415/476-5731.

4 - 5 **Critical Care Update** — Location: Holiday Inn Executive Center, Columbia, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

6 **Hypercholesterolemia: Practical Aspects to Patient Management** — Location: Hyatt Regency, Union Station, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

8 **Leroy Sante Lecture** — Location: St. Louis University, St. Louis, MO. Contact: R. Gilbert Jost, M.D., Chief of Diagnostic Radiology, Mallinckrodt Institute of Radiology, 510 S. Kingshighway, St. Louis, MO 63110. 314/362-7130.

10 - 13 **Treatment of Surgical Spine Disease** — Location: The Ritz-Carlton Hotel, St. Louis, MO. Contact: Cathy Caruso, CME Office, Washington University School of Medicine, 660 S. Euclid, Box 8063, St. Louis, MO 63110. 1-800-325-9862 or 314/362-6893.

11 - 12 **23rd Annual Matt Weiss OB/GYN Symposium** — Location: Breckinridge Frontenac Hotel, St. Louis, MO. Contact: Judith O'Guin, St. John's Mercy Medical Center, 615 S. New Ballas Road, St. Louis, MO 63141. 314/569-6290.

12 - 13 **The 6th Dr. Robert K. Match Distinguished Scholar Program: Controversies In the Management of Breast Cancer** — Location: The Waldorf-Astoria, New York, N.Y. Contact: Ann J. Boehme, CMP, Associate Director of Continuing Education, Long Island Jewish Medical Center, New Hyde Park, NY 11042. 718/470-8650, or FAX: 516/352-4801.

12 - 14 **Annual Geriatric Psychiatry Conference: Recognition and Treatment of Problem Behaviors in Long Term Care** — Location: Tan-Tar-A Resort, Osage Beach, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63014. 1-800-553-2712.

13 **Electro Compulsive Therapy** — Location: Hyatt Regency-Union Station, St. Louis, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

17 - 19 **Seventh Non-invasive Diagnosis of Vascular Disease Symposium** — Location: Sheraton St. Louis, St. Louis, MO. Contact: Judith O'Guin, St. John's Mercy Medical Center, 615 S. New Ballas Road, St. Louis, MO 63141.

18 - 21 **Advanced Microsurgery of the Lumbar & Cervical Spine** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

22 - May 3 **Institute For Clinical Health Care Ethics** — Location: St. Louis University, Margaret McCormick Doisy Learning Resources Center, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-533-2712.

25 - 26 **18th Annual Obstetrics and Gynecology Symposium** — Location: Washington University Medical Center, St. Louis, MO. Contact: Cathy Caruso, CME Office, Washington University School of Medicine, 660 S. Euclid, Box 8063, St. Louis, MO 63110.

April

27 Gastroenterology/Hepatology Conference – Location: Regency - Union Station, St. Louis, MO. Contact: St. Louis University School of Medicine, Continuing Medical Education, 1402 S. Grand Blvd., St. Louis, MO 63140. 1-800-553-2712.

30 - May 2 Molecular Basis of Bone Cell Physiology: Transcellular Signaling – Location: The Sheraton West Port Inn, St. Louis, MO. Contact: Cathy Caruso, CME Office, Washington University School of Medicine, 660 S. Euclid, Box 8063, St. Louis, MO 63110. 1-800-325-9862 or 314/362-6893.

May

1 Updates in Diabetes – Location: St. John's Mercy Medical Center, von Gontard Conference Center, St. Louis, MO. Contact: Judith L. O'Guin, St. John's Mercy Medical Center, 615 S. New Ballas Rd., St. Louis, MO 63141. 314/569-6930.

1 - 3 Protection for Research Risk – Location: The Hyatt Regency, Union Station, St. Louis, MO. Contact: Cathy Caruso, CME Office, Washington University School of Medicine, 660 S. Euclid, Box 8063, St. Louis, MO 63110. 1-800-325-9862 or 314/362-6893.

2 - 3 Current Management in Critical Care – Location: Allis Plaza Hotel, Kansas City, MO. Contact: Linda F. Smutz, Kansas City Southwest Clinical, 7920 Ward Parkway, Suite 205, Kansas City, MO 64114. 816/523-3383.

3 - 5 OR Legal Environment: Medicine Response – Location: Don CeSar Beach Resort, St. Peters burg, FL. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-533-2712.

8 - 9 Focus on Acute Pediatric Conditions – Location: St. John's Mercy Medical Center, von Gontard Conference Center, St. Louis, MO. Contact: Judith L. O'Guin, St. John's Mercy Medical Center, 615 S. New Ballas Rd., St. Louis, MO 63141. 314/569-6290.

10 - 11 Allergy For the Clinician – Location: Ritz Carlton Hotel, St. Louis, MO. Contact: St. Louis School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-533-2712.

13 City-Wide Radiology Conference – Location: Mallinckrodt Institute of Radiology, St. Louis, MO. Contact: R. Gilbert Jost, M.D., Chief of Diagnostic Radiology, Mallinckrodt Institute of Radiology, 510 S. Kingshighway, St. Louis, MO 63110. 314/362-7130.

13 - 18 Health Care Ethics in a Pluralistic Society – Location: St. Louis University, Margaret McCormick Doisy Learning Resource Center, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand, St. Louis, MO 63104. 1-800-533-2712.

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May

16 - 18 **Vascular Surgery 1991** — Location: The New York Marriott Marquis, New York, NY. Contact: Ann J. Boehme, CMP, Associate Director for Continuing Education, Long Island Jewish Medical Center, New Hyde Park, New York, NY 11042. 718/470-8650.

17 - 19 **Surgical Treatment of Surgical Fractures: Hands-On State-Of-The-Art Workshop** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand, St. Louis, MO 63104. 1-800-533-2712.

17 - 19 **Internal Medicine Review** —Location: University of Missouri, Columbia, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

31 - June 2 **A.K. Rice National Scientific Program** — Location: Ritz-Carlton Hotel, St. Louis, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

June

3 - 5 **Microsurgery of the Peripheral Nerve** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University School of Medicine, Continuing Medical Education, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

6 - 7 **Patent Development** — Location: Eldorado Hotel, Santa Fe, NM. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

6 - 8 **Microsurgery of the Spine: Stabilization** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University School of Medicine, Continuing Medical Education, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

7 **Ultrasound Perinatal Sonography** — Location: Adam's Mark Hotel, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand, St. Louis, MO 63104. 1-800-533-2712.

7 - 8 **Primary Pediatrics** — Location: University of Missouri, Columbia, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

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Medical School News

University of Missouri-Columbia

Jack M. Colwill, M.D.

Jack M. Colwill, M.D., professor and chairman of family and community medicine, has been appointed to the 13-member Council on Graduate Medical Education by **Louis Sullivan, M.D.**, secretary of the U.S. Department of Health and Human Services.

The council, mandated by Congress, is charged with providing recommendations on physician manpower policy to Congress and Sullivan. In conjunction with the appointment, Colwill will serve on the council's Physician Manpower Subcommittee. Colwill will serve a four-year term on the council, which meets at least three times a year.

A member of the MU faculty since 1964, Colwill became chairman of the department of family and community medicine in 1977.

Philip Anderson, M.D., professor and director of dermatology, spoke on "AIDS and Syphillis" at the American Academy of Dermatology's recent annual meeting in Atlanta, Georgia, and gave a presentation on new technology to the academy's long-range planning board. Anderson also discussed "Classifications of Systems in Dermatology" at the Conference on the History of Medicine in Atlanta.

David Clark, M.D., assistant professor of dermatology, spoke on "Worrisome Lesions of the Teeth, Gums and Mouth" at the American Academy of Dermatology meeting in Atlanta, Georgia.

William Davis, M.D., professor and chief of otolaryngology, recently presented a paper on results and risk factors of endoscopic sinus surgery to the American Academy of Otolaryngology in San Francisco.

John DeSpain, M.D., assistant professor of dermatology, has been appointed to the Committee on Computer Technology and was named chairman of the Task Force on Derm/DDX (diagnostic system) for the American Academy of Dermatology. DeSpain also is a new member of the Committee on Continuing Education and Research for the American Society of Dermatopathology.

Robert Gaines, Jr., M.D., professor of orthopedic surgery, recently gave a presentation for a course at the Institute for Spinal Studies in London, England. Gaines also has been appointed program chairman for the 1991 annual meeting of the North American Spine Society and the Scoliosis Research Society.

Basij Georgi, M.D., assistant professor of general surgery, spoke on bullet and shell fragment injuries recently at the 50th annual meeting of the American Association for the Surgery of Trauma in Tucson, Arizona.

Brent W. Miedema, M.D., assistant professor of general surgery, received the Young Investigator Award at the American Motility Society meeting in Newport, Rhode Island, for his article titled, "Pacing the Human Stomach."

Frank Mitchell, M.D., professor of general surgery, presided over the first annual conference of the Missouri division of the American Trauma Society held in Jefferson City.

Karl D. Nolph, M.D., professor and director of nephrology, recently made three presentations in Vienna, Austria, at the Second International Interdisciplinary Symposium on the Peritoneum and Peritoneal Access. He also gave three invited lectures at a conference on peritoneal dialysis in Montreaux, Switzerland.

Gregory Renner, M.D., associate professor of otolaryngology, presented a course on "Z-Plasty Techniques in Head and Neck Surgery" at the American Academy of Otolaryngology meeting in San Francisco.

John Schuder, Ph.D., professor emeritus of cardiothoracic surgery, presented a paper titled, "Research Defibrillator for Generating 'Single Capacitor' Type Biphasic Waveforms" at the 25th annual meeting of the Association for the Advancement of Medical Instrumentation in Anaheim, California.

Hugh Stephenson, Jr., M.D., professor of general surgery, recently was elected chairman of the Missouri delegation to the House of Delegates of the American Medical Association. He also is an elected member of the Liaison Committee of the AMA Council on Medical Education and is secretary of the Surgical Caucus. Stephenson also was appointed chairman of the reference committee on scientific affairs for the interim meeting of the House of Delegates in December.

MSMA 133rd
Annual
Convention
April 3-7, 1991
Crown Center
Kansas City

Resident Section News

Resident Physicians Attend RPS/AMA Meeting in Orlando

The delegation for the Missouri Chapter, Resident Physician Section of the AMA, listen during a meeting of the general session.

The delegation for the Missouri chapter, Resident Physician Section (RPS) of the American Medical Association, (AMA) attended the Orlando, Florida RPS/AMA meeting. In attendance were Chris Pittman of St. Louis, and Victoria Muehlebach, Gregory Hill, James Spiller and Chief Delegate James R. Allen of Kansas City.

The Missouri delegation submitted a resolution onto the general floor of the RPS/AMA. The resolution addressed the problems of the Physician Review Organization (PRO) assignment of points to physicians in training. A composite resolution by the delegations of Missouri and California was passed.

The bi-monthly meeting of the Missouri Chapter of the RPS was held in Orlando also. President Robert McQuillan chaired the meeting. Recruitment and schedule of meetings for 1991 were the main topics.

Schedule of Meetings — 1991

February 3, 1991 — 12:00 p.m.
St. Louis University Hospital
Radiology Conference Room
(2nd Floor)
3635 Vista at Grand Blvd.
St. Louis, Missouri

April 6, 1991 — 1:30 p.m.
Westin Crown Center
One Pershing Road
Kansas City, Missouri

June 2, 1991 — 11:00 a.m.
University Hospital and Clinic
Room 1 West - 19
One Hospital Drive
Columbia, Missouri

■

New Members

■ **Edna N. Daniels, D.O.**, St. Francis Medical Center, Emergency Room, 211 St. Francis Drive, Cape Girardeau 63701, has become a member of the Cape Girardeau County Medical Society. Dr. Daniels received her preliminary education at the University of Missouri-Kansas City and obtained her osteopathic degree at the University of Health Sciences in 1977. She completed her residency at Doctor's Hospital, Columbus, Ohio. Dr. Daniels specializes in emergency medicine.

■ **Mark S. Faszholz, M.D.**, 525 Couch Ave., St. Louis 63122, has become a member of the Missouri State Medical Association. Dr. Faszholz received his preliminary education at Drury College and obtained his medical degree at the University of Missouri-Columbia in 1982. He completed his residency at the University of Arizona, Tucson, AZ. Dr. Faszholz specializes in anesthesiology.

■ **Roy D. Hinds, M.D.**, P.O. Box 975, Eastgate Bldg., Columbia 65201, has become a member of the Boone County Medical Society. Dr. Hinds received his preliminary education at Westminster College and obtained his medical degree at the University of Missouri-Columbia in 1963. He completed his residency at the University of Missouri Hospital and Clinics, Columbia, MO. Dr. Hinds specializes in anesthesiology.

■ **Randall B. Hudson, M.D.**, Westport Anesthesia Services, 8900 Ward Parkway, Suite 200, Kansas City 64141, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. Hudson received his preliminary education at Duke University and obtained his medical degree at the University of Massachusetts Medical School in 1978. He completed his residency at Beth Israel Hospital, Boston, MA. Dr. Hudson specializes in anesthesiology.

■ **Francis X. Jana, M.D.**, 915 N. Grand Ave., St. Louis 63110, has become a member of the Missouri State Medical Association. Dr. Jana received his preliminary education at St. Louis College of Pharmacy and obtained his medical degree at the American University of the Caribbean in 1986. He completed his residency at St. Elizabeth's Hospital, Elizabeth, NJ. Dr. Jana specializes in internal medicine.

■ **Rosellen S. Meystrik, M.D.**, Whiteside Medical Building, 2115 South Fremont, Springfield 65804, has become a member of the Missouri State Medical Association. Dr. Meystrik received her preliminary education at Wesleyan University and obtained her medical degree at the University of Missouri-Columbia School of Medicine in 1984. She completed her residency at the University of Missouri Hospital and Clinics, Columbia, MO. Dr. Meystrik specializes in plastic and reconstructive surgery.

■ **Timothy V. Myers, M.D.**, 2301 Holmes, Kansas City 64108, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. Myers received his preliminary education at Seattle University and obtained his medical degree at the University of Missouri-Kansas City in 1985. He completed his residency at the University of Missouri-Kansas City, Kansas City, MO. Dr. Myers specializes in radiology.

■ **Harvey D. Nitzky, M.D.**, West County Anesthesia, Inc., 305 N. Ballas Rd., St. Louis 63131, has become a member of the Missouri State Medical Association. Dr. Nitzky received his preliminary education at Yeshiva University and obtained his medical degree at the University Autonoma de Guadalajara in 1981. He completed his residency at the State University of New York, Brooklyn, NY. Dr. Nitzky specializes in anesthesiology.

■ **James H. Olson, M.D.**, Suite 100, Westowne III, Liberty 64068, has become a member of the Clay-Platte County Medical Society. Dr. Olson received his preliminary education at the University of Nebraska and obtained his medical degree at the University of Nebraska School of Medicine in 1986. He completed his residency at Oregon Health Sciences University, Portland, OR. Dr. Olson specializes in internal medicine.

■ **Thomas C. Pearson, M.D.**, 1900 S. National, Suite 2900, Springfield 65804, has become a member of the Greene County Medical Society. Dr. Pearson received his preliminary education at the University of Kansas and obtained his medical degree at the University of Kansas School of Medicine in 1985. He completed his residency at the University of Kentucky College of Medicine, Lexington, KY. Dr. Pearson specializes in urology.

■ **F. David Schneider, M.D.**, University of Missouri-Columbia, M228 Health Sciences Bldg., 1 Hospital Drive, Columbia 65212, has become a member of the Boone County Medical Society. Dr. Schneider received his preliminary education at Boston University and obtained his medical degree at the Boston University School of Medicine in 1987. He completed his residency at Duke/FAHEC Family Practice, Fayetteville, NC. Dr. Schneider specializes in family practice.

■ **Karl R. Stark, M.D.**, Truman Medical Center, 2301 Holmes, Kansas City 64113, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. Stark received his preliminary education and obtained his medical degree at the University of Missouri-Kansas City in 1979. He completed his residency at Truman Medical Center, Kansas City, MO. Dr. Stark specializes in vascular surgery.

■ **Stephen T. Welton, M.D.**, 808 E. Wakefield, Sikeston 63801, has become a member of the SEMO County Medical Society. Dr. Welton received his preliminary education at Sonoma State University and obtained his medical degree at the American University of the Caribbean in 1982. He completed his residency at Deaconess Hospital, St. Louis, MO. Dr. Welton specializes in internal medicine.

■ **Harold V. Werner, M.D.**, Doctors' Pavillion, 1115 Alaska Ave., Suite 114, West Plains 65775, has become a member of the Howell County Medical Society. Dr. Werner received his preliminary education at Huron College and obtained his medical degree at Northwestern University School of Medicine in 1966. He completed his residency at Northwestern University School of Medicine, Chicago, IL. Dr. Werner specializes in internal medicine.

■ **J. Mark Wilson, M.D.**, 1675-J E. Seminole, Springfield 65804, has become a member of the Greene County Medical Society. Dr. Wilson received his preliminary education at Southern Nazarene University and obtained his medical degree at the University of Oklahoma School of Medicine in 1984. He completed his residency at the University of Oklahoma Health Sciences Center, Oklahoma City, OK. Dr. Wilson specializes in diagnostic radiology.

■ Resident Members

Rebecca S. Walker, M.D. — *ophthalmology*
Mohammed J. Zafar, M.D. — *neurology*

■ Student Members

Washington University

Steve Cersovsky
Ali R. Hamzei
Brian S. Waggoner

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References:

1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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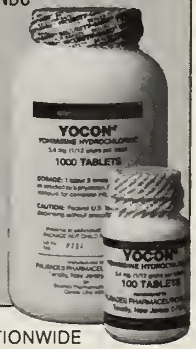

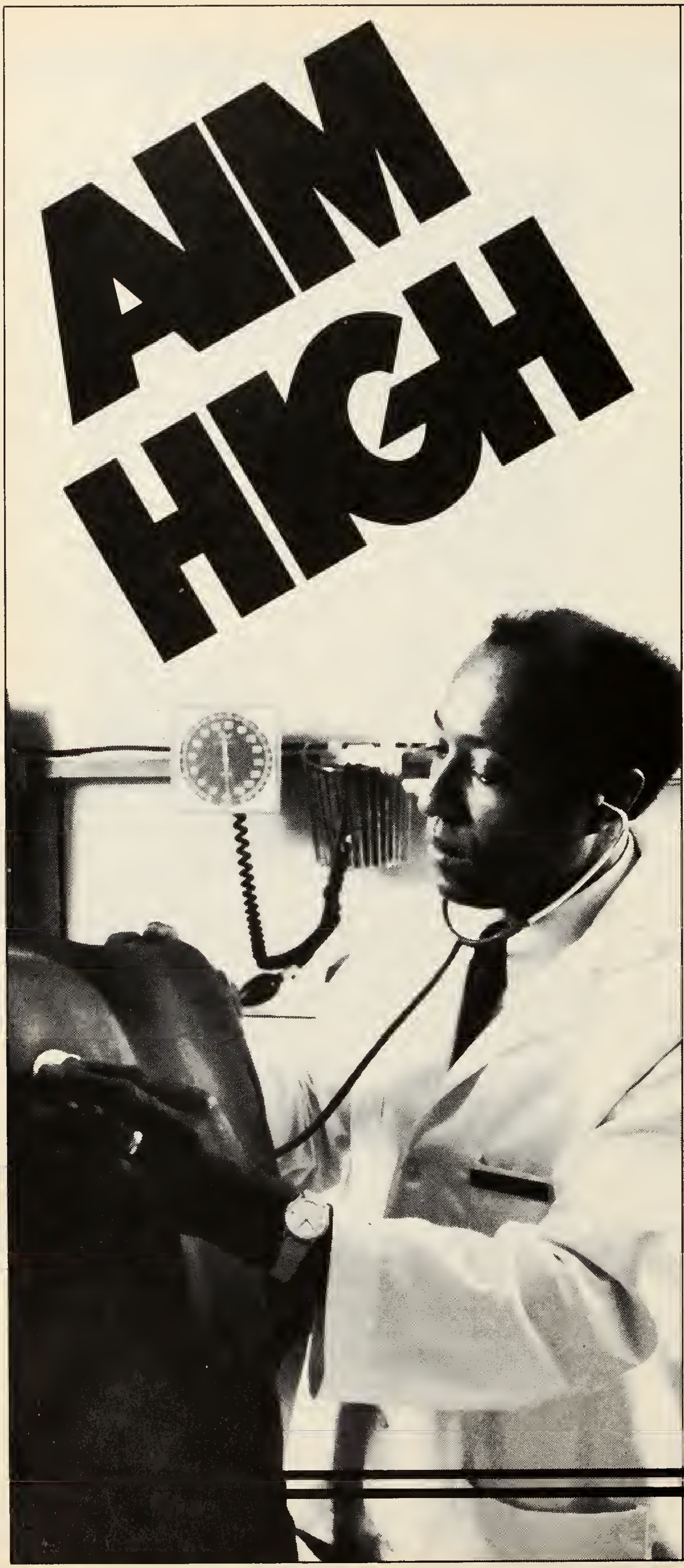

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AIR FORCE

In Memoriam

■ **Drennan Bailey, M.D.**, died November 14, 1990 at the age of 68. Dr. Bailey, a surgeon, practiced medicine in Frontenac for 40 years. He founded a medical center in Frontenac and was on the staffs of Incarnate Word Hospital and Christian Northeast and Northwest hospitals. He served for more than 30 years on the staffs of Missouri Baptist and Deaconess hospitals. He obtained his medical degree at the Washington University School of Medicine in 1946. Dr. Bailey was a member of the St. Louis Metropolitan Medical Society.

■ **William R. Bynum, M.D.**, died November 24, 1990 at the age of 63. Dr. Bynum, a pathologist, practiced medicine in Columbia for 20 years. Together with John Boyce, he founded Boyce and Bynum Pathology Laboratories in 1965. He served as medical director until his retirement in 1984. Prior to coming to Columbia, he practiced medicine in Pryor, Oklahoma for 10 years. He obtained his medical degree at the University of Oklahoma in 1951. Dr. Bynum was a member of the Boone County Medical Society.

■ **J. Russell Comer, M.D.**, died November 25, 1990 at the age of 54. Dr. Comer, a radiologist, practiced medicine in Hannibal for 18 years. He obtained his medical degree at the University of Kansas Medical School in 1954. Dr. Comer was a member of the Northeast County Medical Society.

■ **Mary E. Cox, M.D.**, died October 25, 1990 at the age of 71. Dr. Cox, a child psychiatrist, practiced medicine in St. Louis. She obtained her medical degree at the Washington University School of Medicine in 1944. Dr. Cox was a member of the St. Louis Metropolitan Medical Society.

■ **Leo F. Donley, M.D.**, died October 20, 1990 at the age of 72. Dr. Donley, an occupational medical specialist, practiced medicine in St. Louis. He obtained his medical degree at the Washington University School of Medicine in 1943. Dr. Donley was a member of the St. Louis Metropolitan Medical Society.

■ **John J. Duggan, M.D.**, died November 19, 1990 at the age of 66. Dr. Duggan, an obstetrician/gynecologist, practiced medicine in St. Louis. He obtained his medical degree at the Louisiana State University School of Medicine in 1948. Dr. Duggan was a member of the St. Louis Metropolitan Medical Society.

■ **Paul L. Friedman, M.D.**, died December 6, 1990 at the age of 59. Dr. Friedman, an anesthesiologist, practiced medicine in St. Louis. He served as a physician in the Navy in the early 1960s and was director of anesthesia at Jewish Hospital for several years in the mid-1960s. He then joined St. Mary's Health Center in Richmond Heights as an anesthesiologist, a post he held until his death. He was also an assistant clinical professor of anesthesiology for several years at St. Louis University School of Medicine and at Washington University School of Medicine. He obtained his medical degree at the Washington University School of Medicine in 1957. Dr. Friedman was a member of the St. Louis Metropolitan Medical Society.

■ **Wilbur K. Mueller, M.D.**, died October 22, 1990 at the age of 94. Dr. Mueller, a radiologist, practiced medicine in St. Louis. He obtained his medical degree at the St. Louis University School of Medicine in 1925. Dr. Mueller was a member of the St. Louis Metropolitan Medical Society.

Editor's Note: In the January Missouri Medicine, William R. Bynum, M.D., was incorrectly listed as William R. Bynum, D.O. We have reprinted Dr. Bynum's in memoriam in this month's issue. Missouri Medicine regrets the error.

Missouri Physicians' Health Program

Contributors

St. Joseph Health Center Medical Staff
Kansas City

Audrain Medical Center
Mexico

Audrain Medical Center Medical Staff
Mexico

Incarnate Word Hospital
St. Louis

Incarnate Word Hospital Medical Staff
St. Louis

Barnes-St. Peters Hospital Medical Staff
St. Peters

Dexter Memorial Hospital Medical Staff
Dexter

St. Mary's Hospital Medical Staff
Blue Springs

St. Joseph Health Center
Kansas City

Cardinal Glennon Children's Hospital
St. Louis

Cardinal Glennon Children's Hospital
Medical Staff
St. Louis

Independence Regional Health Center
Independence

Independence Regional Health Center
Medical Staff
Independence

St. Luke's Hospital Medical Staff
Kansas City

Jewish Hospital
St. Louis

Jewish Hospital Medical Staff
St. Louis

Research Psychiatric Center
Kansas City

Medical Center of Independence
Medical Staff
Independence

North Kansas City Memorial
Hospital Medical Staff
North Kansas City

Risk Control Associates
Kansas City

St. Joseph Health Center and St. Joseph
Hospital West Medical Staff
St. Charles

Freeman Hospital
Joplin

Freeman Hospital Medical
and Dental Staff
Joplin

St. Luke's Hospital
St. Louis

St. Luke's Hospital Medical Staff
St. Louis

St. John's Regional Medical Center
Joplin

St. John's Regional Medical Center
Medical Staff
Joplin

Research Medical Center
Kansas City

Research Medical Center Medical Staff
Kansas City

Baptist Medical Center Medical Staff
Kansas City

Menorah Medical Center Medical Staff
Kansas City

Lake Ozarks Medical Society
Lake of the Ozarks

St. John's Regional Health Center
Springfield

Missouri Medical Insurance Company
St. Louis

Medical Defense Associates
Springfield

Springfield Chapter of the American
Academy of Family Practice
Springfield

Christian Hospital NE/NW Medical Staff
St. Louis

St. Anthony's Medical Center
St. Louis

St. Anthony's Medical Center
Medical Staff
St. Louis

Lutheran Medical Center
St. Louis

Lutheran Medical Center
Medical and Dental Staff
St. Louis

Truman Medical Center Medical Staff
Kansas City

Baptist Medical Center
Kansas City

Baptist Hospital Medical Center
Medical Staff
Kansas City

Western Missouri Medical Center
Warrensburg

Boone Hospital Center Medical Staff
Columbia

St. Mary's Health Center Medical Staff
Jefferson City

Physician's Recognition Awards

Forty-nine MSMA members qualified for the MSMA-AMA Physician's Recognition Award during November 1990. The award, presented by the Missouri State Medical Association and the American Medical Association, is given to those physicians who voluntarily complete 150 credit hours of continuing medical education within a three-year period. Sixty of the credit hours must be earned in Category 1 programs.

Boone

Loren J. Humphrey, *Columbia*
Susan W. Krechel, *Jonesburg*
Karl D. Nolph, *Columbia*

Buchanan

Robert J. Williams, D.O., *St. Joseph*

Cape Girardeau

John K. Holcomb, *Cape Girardeau*

Clay-Platte

Timothy A. Wilson, *Smithville*

Dunklin

Nicholas F. Robinson, *Kennett*

Greene

Michael W. Good, *Springfield*
Efraim L. Reyes, *Springfield*
Timothy A. Tesmer, *Springfield*
James B. Wolfe, *Springfield*

Metro Med of Greater Kansas City

Jeffrey O. Anglen, *Kansas City*
Romeo F. Arribas, *Blue Springs*
Rolfe A. Becker, *Kansas City*
Michael S. Fedotin, *Kansas City*
John C. Hall, *Kansas City*
Sam E. Maben, *Kansas City*
David S. McKinsey, *Kansas City*
James L. Russell, *Kansas City*
Gordon C. Sauer, *Kansas City*
James J. Thomas, *Kansas City*
Paul A. Williams, *Kansas City*

Ozarks

James R. Carter, *Neosho*
F.R. Esparrago, *Monett*

SEMO

Aziz O. Mahboubi, *Sikeston*
William D. Miller, *Dexter*

St. Charles-Lincoln

Charles M. Linsenmeyer, *St. Charles*

St. Louis Metro

Lucia V. Beare, *St. Louis*
Richard V. Bradley, *St. Louis*
Samuel A. Canaan, *St. Louis*
Mark Chin, *Chesterfield*
Jack Cokrhame, *Florissant*
Oblendo A. Cuento, *Chesterfield*
Robert M. Feit, *St. Louis*
Karl A. Jacob, *St. Louis*
Michael A. Kass, *St. Louis*
James W. Knight, *St. Louis*
Nicholas T. Kouchoukos, *St. Louis*
Arnoldo Kuczer, *St. Louis*
Bernard S. Loitman, *St. Louis*
Robert C. Loynd, *Clayton*
William H. Paris, *Bridgeton*
Andrew T. Pickens, *St. Louis*
Lisa B. Ring, *Bridgeton*
Walter R. Stafford, *Clayton*
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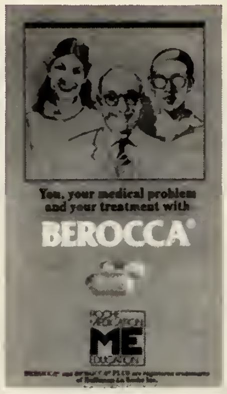
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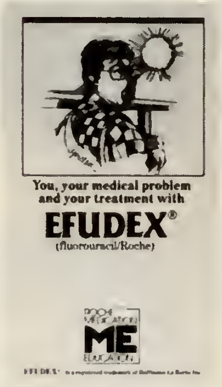
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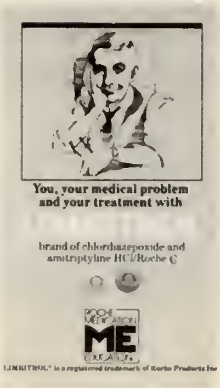
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GUEST EDITORIAL

by Garland Land and
Michael Metzler, M.D.

In Missouri, physicians need to use their influence and personally encourage their legislators to strengthen the state DWI laws. We have to make some changes in order to save some lives.

"One For the Road" in Missouri

Annually, driving while intoxicated in Missouri causes: 281 funerals, 7,861 persons to be injured, 1,308 persons to be hospitalized, 419 persons to sustain a head injury, 18 persons to be in a persistent vegetative state, and 10 persons to use a wheelchair for life because of a spinal cord injury. Every 1.1 hours a person in Missouri is killed or injured in a drinking-related traffic crash. Sixty percent of the driving while intoxicated (DWI) related funerals are for children and young adults under the age of 29. Drinking while driving kills more people under the age of 34 than any single disease.

Financial Impact. Besides the medical impact, the financial impact of driving while intoxicated is also devastating. Persons hospitalized from drinking-related crashes require more than 8,500 days of hospital care per year. The estimated medical costs to Missourians involved in alcohol-related crashes exceeds $10 million per year. Twenty-seven percent of the patients have no insurance. Missouri hospitals and physicians are donating nearly three million dollars annually to care for patients involved in DWI-related crashes. For those persons fortunate enough to have insurance, their employers generally pay the DWI-related medical bills amounting to nearly six million dollars.

Physicians Know. The above statistics were provided by the Missouri Department of Health. Physicians know the tragedy from the personal stories of patients and families. These statistics cannot describe the feeling of telling a mother that her son could not be saved, or seeing a beautiful girl with burr holes lose much of her cognitive function, or working with a family to find an institution to provide long term care for a comatose child.

Unfortunately, the problem is not getting better. In fact, the number of known DWI-related deaths in 1989 was the highest in five years.

Present Laws Flawed. From the experience of other states we know what can be done to take action against this senseless and preventable loss of life and resources. States with tough DWI laws have decreased deaths and injuries. Missouri has passed several DWI laws in the past few years, but major loopholes in these laws, make them ineffective:

- Under present law, a person can legally drive from Kansas City to St. Louis drinking from a bottle of Scotch.
- A person can be convicted of multiple DWI offenses and have his driver's license revoked, but still legally drive while the license is under revocation.
- A person can be convicted of a DWI offense in municipal court, but the offense is never recorded against his license.

It has been argued in the past that the only thing dangerous about driving while drinking is that one of the driver's hands is

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■ Guest Editorial
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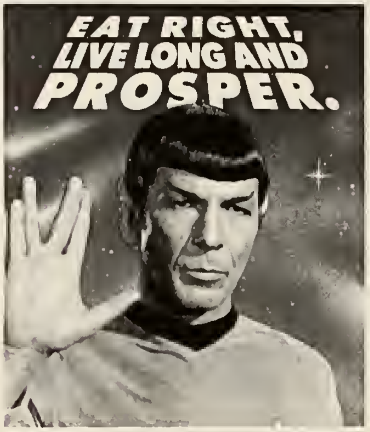
off the steering wheel. It has been suggested that it is just as dangerous to drive while eating as it is to drive while drinking alcoholic beverages. This type of logic has prevailed to the extent that bills to prohibit drinking while driving have failed to even get out of committee.

What can be done? Senator Harry Wiggins has introduced Senate Bills 125 and 174, and Senators Dennis Smith and Jeff Schaeperkoetter have introduced Senate Bill 341. Representatives Chris Kelly, Joe Bock and Ted House have introduced House Bill 103 to strengthen Missouri DWI bills. If Missouri strengthens its DWI laws to meet federal standards, the state will be eligible to receive six million dollars over the next five years for alcohol and drug countermeasure programs. The legislative proposals will:

- bar Missouri drivers from drinking alcohol while driving;
- lower the blood-alcohol content needed for conviction of drunken driving to 0.08%;
- make municipal DWI violations subject to state penalties;
- restrict eligibility for hardship driving privileges;
- allow arresting officers at the scene to take the license of the driver who refuses to take an alcohol test.

Do not assume this is one of those issues that all responsible people will understand; that they will see the need to change our DWI laws. The present laws were deliberately passed based on information that the legislature received and the lack of voiced concern from other groups such as the medical community. Physicians need to use their influence and personally encourage their legislators to strengthen the state DWI laws. Your voiced concern, and perhaps personal stories of working with families and treating patients involved in DWI-related crashes, could help your senator and representative weigh differently the messages they receive from other interest groups. ■

Editor's Note: Mr. Land is the Director of the Division of Health Resources, Jefferson City, MO. Dr. Metzler is an associate professor of surgery and Chief of the Division of General Surgery at the University of Missouri-Columbia School of Medicine, Columbia, MO.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EDITOR'S DESK

by Wilfred E.
Wooldridge, M.D.
Guest Editor

A conventional medical education is a marvelous means of becoming factually informed, but it woefully lacks many practicalities of practice. A seasoned physician attempts to forewarn the young practitioner of numerous pitfalls not included in the medical school curriculum.

Advice To A Young Doctor

(From An Old Doctor Who's Been There)

It was a long, long haul. It began in high school when you first thought of becoming a doctor. It budded in college and bloomed when that medical school acceptance letter came in the mail. All that was left was to survive another four years, a trivial matter of two to five more years of residency and the world would be banging on your door.

Right? Sorry, but that diploma bearing "your name, M.D.," plus hospital training, only meant that your *real* education was just beginning. There are problems you never heard about in school. But you will!

One of those problems as an emerging physician, is that you become a prime target for every wild proposal conceived by the mind of man. For example, I know a doctor who decided to leave practice to teach in medical school. He advertised his 800-acre farm in a national newspaper. Eleven non-profit guys offered to take the farm off his hands because a rich doctor didn't need the money and could use it as a write-off. How's that for open season?

Early in your career you will shop for an office, then sign your first lease. The agent has done this 800 times before and knows your kind better than he knows his wife. What you sign for him is not "just" a lease. It is also a document immensely benefitting your agent and the building's owner. That lease will be written in such heart-wrending terms, you'll think you're taking candy from a baby. Or, it will be so wordy that Webster would run for shelter. Either way, you lose. Did you ever hear anything like that between the orthopedic and allergy lectures?

That's just the beginning, of course. Let me introduce you to other pitfalls. Not all of them, mind you, but a fair portion.

- The day after you are listed in the new telephone directory, you will receive a letter inviting you to an "economic seminar." If you make a mistake and attend, you will find there a person known as an "economist." Run, do not walk, to the nearest exit! There are only three things a seminar economist knows: something never happens, the next happens occasionally, and the last happens often. He can't predict which is which any better than you or he would be on his yacht in the Caribbean. Instead, he makes money *talking* about it.

- Before you practice very long, you will encounter an obnoxious patient. You will enter the room and politely ask, "What may I do for you?" The reply will be, "That's what I came to you to find out."

Don't come back with an equally rude reply. Just sit down and compile a long list. Finally the smart-aleck will take the bait and ask, "What are you doing?"

You reply, "I am writing orders for about $800 worth of X-rays and laboratory tests that are not covered by insurance. They will help me make a decision about you, unless you decide to be helpful."

This will have one of two effects. If you are lucky, the patient

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■ Editor's Desk

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will simply stalk out the door. If not, he will have had his bluff called, become more tractable and perhaps even pleasant, though probably not. I tend to think that once one, always one.

- Never forget that almost no stockbrokers are Rhodes scholars. They really don't care what they sell, or to whom, as long as the commission exists. Those certificates have no 50,000 mile warranty. If you do get into stocks, do it only after exhaustive research. That adds to the effort of already tiring days and too little time with your family. If you have that kind of energy, better over the long haul to moonlight for the Veterans Administration.

- Elderly patients who live in town with nothing to do after breakfast will *insist* on an appointment at 10:30 Wednesday morning. Also, they will be the first to let you know that you are 20 minutes behind schedule. There is also that smiling and agreeable dairy farmer from 50 miles away who works from 4:30 a.m. until dark. He will take any appointment time, and you will never have a nicer patient.

- If you have a spasm to invent something, don't fool around with artificial hearts, plastic craniums, colon transplants and such nonsense. Be practical! Come up with something like a pill to prevent both pregnancy and sunburn. The world will come to you on bended knee.

- Everything considered, it might be best if you sweep through your office every 10 years and fire everybody in sight. Employees who stay too long make themselves seem indispensable but have a quiet, malicious way of doing things you don't know about . . . yet.

- No matter how many appointments are cancelled on stormy days, the last one will always be kept, 15 minutes late.

- Never, never lay an amorous hand on an office employee. If you think it can be kept secret you're wrong. No matter how cleverly you may think you pull it off, that liaison will make headlines in the morning newspaper. Besides, it makes other employees jealous.

- Do not aggravate hospital nurses. They not only have a rough job, but they can make your life miserable, and they will.

- The cost of auto maintenance is roughly proportional to the cost of the new car. You will pay about 13 brain tumor operations for a Rolls Royce. To keep it running costs a monthly laminectomy. Ford Fiestas cost three coronaries and operate beautifully on a sore throat every six weeks.

- Be wary of a highly touted new stock issue. If it really was a 24-carat bargain, you wouldn't get a smell of it.

- If your practice begins to include too many great, amorphous blobs who hobble in while complaining loudly of knees, hips, backs and the "arthritis," consider changing professions. There are things more important than daily bread.

- As quickly as you have affiliation with a hospital, be sure to tell the chiefs of medicine and surgery that they are the greatest entities since the invention of the horseless carriage, whether you think so or not. If the hospital administrator is a young fellow, tell him the same thing. If he is old and looks tired around the eyes, forget it. He's heard that one before.

- Patients with delusions of parasitosis are like sick dogs; they only get worse. They arrive with tiny flakes of skin, floor sweepings of broken hairs, all carefully wrapped in facial tissue, and loudly complain of their bites. Be kind to them because they are miserable. However, look sad, tell them you have exactly the same trouble and there is no cure. Those people have deep-seated psychoses. I have yet to see one helped by any sort of treatment.

- When that long-awaited affluence comes, and you think of traveling abroad, please try *not* to be a typical American tourist. Attempt a bit of the local language, however feebly, smile and be polite.

I will never forget the humiliation of being an American while having dinner at Henrici's in Mexico City. One of our party wanted a double martini. To the very solicitous and capable English-speaking waiter, he exclaimed, "El doublay, el doublay! Can't you understand Mexican?"

- If you finish residency on the west coast, don't think of setting up practice on the east coast. It's bad. If you finish residency on the east coast, don't think of setting up practice on the west coast. That's even worse. If you consider practicing in the midwest, don't do that either. It's already overcrowded from the east and west coast physicians.

Now, young doctor, you're educated. Any questions?

■

Editor's Note: It is a privilege to welcome back Dr. Wooldridge, a former editor of ***Missouri Medicine****. We continue to learn from this "old" doctor.*

Letters to the Editor

DWI Task Forces

Dear Dr. Sessions:

Last April, a DWI Task Force was formed by the Greene County Medical Society. MSMA Resolution #36, **Task Force on Drunken Driving,** was passed at the MSMA Annual Session in April 1990 and was also passed at the AMA meeting in August 1990. The resolution encouraged local medical societies to form task forces to combat the problem of drunk drivers. (Text of resolution in July 1990, *Missouri Medicine.*)

One of our members, Officer Robby O'Neal, started the Ozarks Mountain Chapter of MADD last fall and then became the state vice-president of MADD; they have worked closely with us. We meet on a regular basis to discuss ways to curb DWIs at a local level in Greene County, and we meet with our members from Missouri General Assembly to do the same on a state-wide basis. The Task Force convinced AETNA Insurance to donate 13 camcorders to Greene County (9 to Springfield Police Department, 3 to Troop D Highway Patrol and 1 to Greene County Sheriff's Department) to aid prosecution of drunk drivers. A survey of 2,000 people stopped at sobriety checkpoints in Springfield had a 96% positive rating. A toll free number for cellular phones was established for reporting suspected impaired drivers directly to police —*DWI (*394).

We have met twice with Governor John Ashcroft to discuss the DWI problem in Missouri (once in Jefferson City and once in Springfield).

Last year Missouri failed to qualify for $1.2 million in federal funds because their drunk driving laws were too lax. Nate Walker's Highway Safety Division's entire budget last year was only $2.7 million. Governor Ashcroft has proposed a bill that would barely enable us to qualify for the federal funds. Multiple attempts to pass stiffer legislation, however, have failed in the Missouri General Assembly. Our medical societies offer an ideal approach to grass roots support because we are viewed as healers; the leading cause of death between the ages of 1 and 44 years is automobile accidents. Drunk drivers cause half of these. We would like for each medical society in Missouri to form a DWI Task Force chaired by a physician with sincere aggressive purpose. The Task Force may include law enforcement officials, prosecuting attorneys, media leaders, and when possible, state representatives and senators. We will contact your local medical society's president soon. Please let him or her know of your interest.

Sincerely,

James R. Blaine, M.D., *Chairman*
Diana Spade, M.D.
Marc McCorcle, M.D.
Philip Fogle, M.D.
Senator Dennis Smith
Representative Doug Harpool
Representative Connie Wible
Sheriff John Pierpont
Officer Robby O'Neal, *President*
Ozark Mountain Chapter MADD
Tom Mountjoy,
Prosecuting Attorney
Capt. Todd Whitson,
Springfield Police Department
Major Ron Worsham,
Springfield Police Department
Capt. S.R. Johnson,
Missouri State Highway Patrol
Robert Berndt, Ph.D.
Sam Kaunley, *Director of Public Affairs, Burlington Northern Railroad*

Money Matters

Dear Dr. Sessions:

I think you have fallen into the trap of physician arrogance in "The Question of Money." You say the difficulty is separating concerns for caring and doctoring from money concerns. But, money is not a thing. It is a token of what we receive for entering with goods or services into an exchange conversation. What and how much society will offer for particular exchanges is dynamic. When $850 for each auto made by Chrysler is consumed by the company's exchange conversations in health care of its workers, our ability to compete internationally, sell and prosper as a nation and society is jeopardized. Our profession is in the marketplace, and brutally effects our society's ability to enter into other conversations in the marketplace.

Doctors are like anyone else. We enter into transactions with people to deliver conditions of satisfaction. For this we are directly or indirectly paid. Society says it doesn't want us to deliver only mechanical care, it wants a human who will inform, explain, etc. It demands new conditions of satisfaction. Physicians must recognize that we deliver services to other people. Caring is not our monopoly. We prefer teachers, guidance counselors, advisors, and lawyers who care. There is no reason for the centrality of care in our work to cause us to shield ourselves from the marketplace.

Of course we have to care; it is a central but poorly learned part of what we sell, or could sell. People have grown tired of confronting doctors who don't care when they are ill. But they

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■ Letters to the Editor
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are trapped; they cannot just go to the garage when they are ill.

When I was treated for heart damage at Massachusetts General recently, it took me five days to shift my physician's conversations from the details of my "disease" to focus on my concern about what will become of me. When I did, he said this was an important concern that I could take up with the "Cardiac Rehab Team." The Cardiac Rehab Nurse left with me a brochure that listed services including psychiatric counseling in case I was concerned about what would become of me.

We have forgotten what we are and what we offer. The problem is now how to keep those mean guys who are trying to regulate our money from polluting our sacred ability to care.

Sincerely,

Matthew Budd, M.D.
Cambridge, Massachusetts ■

Thanks to MSMA

Dear Dr. Sessions:

On behalf of the Missouri Chapter, National Committee for Prevention of Child Abuse, I want to sincerely thank the Missouri State Medical Association for the $750.00 grant to assist in funding the Shaken Baby Syndrome Project.

Your partnership in this two-year public education effort is of vital importance to the Missouri Chapter. Together we can address this most serious and yet preventable form of child abuse.

Our deepest gratitude goes to your organization and to all of your members. We look forward to a successful partnership and project.

Sincerely,

Betty Seeley, President
Jefferson City, Missouri ■

Reservists Dues

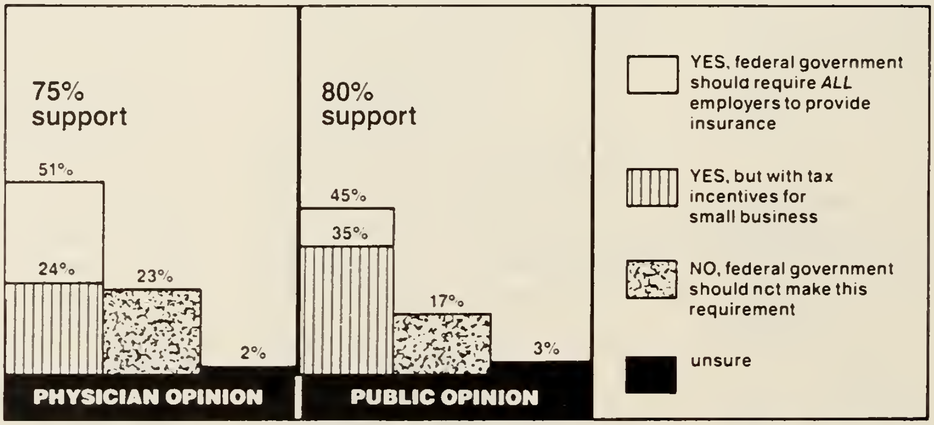
Dear Dr. Sessions:

I appreciated very much the kind letter (from Royal O. Cooper, Executive Vice President of MSMA) regarding the waiver (of dues) for member reservists called to active military duty. My current orders are for a period of six months. At this time in the Gulf War, we are not aware of how long our unit will be committed or needed.

Please convey to the MSMA Council my genuine appreciation for their concrete support of its fighting citizens. I believe my dues have already been paid for this year. Please credit my account accordingly for application to future dues membership with MSMA.

Sincerely,

Colonel C.E. Gene Ridenhour, M.D.
Fort Leonard Wood, Missouri ■



AMERICANS SUPPORT REQUIRED COVERAGE

Doctors and patients agree that employers should be required by law to provide basic health care coverage.
Sources: Dec. '89 Gallup Survey/Physicians Jan. '90 Gallup Survey/Public

A message from The American Medical Association for the Health Access America Proposal

PRESIDENT'S PAGE

by Gary A. Dyer, M.D.
MSMA President

Actively promoting hands-on science teaching is a positive way for physicians to be more intimately involved in local communities.

Hands-On Science — A Community Role for Physicians

Americans are drifting away from scientific study and scientific belief. Individual lives, scientific professions including medicine, and our nation as a whole will suffer if this trend continues. Several organizations are aware of the problem and believe that correction begins with changing the way science is taught in our nation's elementary schools. They suggest that children are naturally curious about themselves and their environment.[1] This natural curiousity should be nurtured by "hands-on" approaches to the teaching of science, and the rote memorization of facts and lists should be discouraged. More time should be devoted to science teaching, and attempts should be made to incorporate science in the teaching of language arts. Physicians are the best-educated scientists in many smaller Missouri communities. I think a large potential role for physicians in the development and support of hands-on science teaching exists in cities and towns throughout the state.

The dislike for science in our country has early beginnings. According to *Newsweek*,[2] 50% of students by third grade and 80% of students by eighth grade "just don't like science." After tenth grade, fewer than half of students take a math or science course, and only 1% study calculus (compared to 12% of Japanese students).[3] Baccalaureate degrees in business have increased dramatically while degrees awarded in science have decreased.[4] In the past 36 years only 54,851 chemists earned doctorate degrees, while in the same period, one million students graduated from law school.[5] Graduate slots in the United States occupied by foreign students have increased 29%.[4] A National Science Foundation Survey found that only 45% of American adults know that the earth orbits around the sun, and only 43% know that electrons are smaller than atoms.[2] Other studies show that only 1 in 3 understand molecules, and only 1 in 6, DNA.[6]

The government and the AMA, as well as science teaching organizations are concerned that the present state of science illiteracy is unhealthy. With the explosion of scientific information and technology, with population increases and an aging population, and with numerous global environment problems, individuals need to be, and the United States would seem to need, citizens educated in science as never before. Individual choices requiring scientific knowledge are many. Nutrition, health care, family planning and birth control, child rearing, and well-paying jobs are just a few. Science knowledge is important in voting on issues of waste management, conservation, pesticide use, clean air and water, and the ozone layer. The United States needs an adequate supply of young people entering professions in science for our nation to properly defend itself, for replacement of teachers retiring in scientific fields, and for maintaining a

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leading position in science research and technology.

The National Sciences Resources Center (NSRC) was created in 1985 as a joint endeavor of the Smithsonian Institution and The National Academy of Sciences. The center sponsors outreach and leadership development activities, develops and disseminates curriculum materials for teachers, and maintains a collection and database of teaching resources. Fifteen teams were selected to participate in the most recent NSRC Elementary Science Leadership Institute held at the Smithsonian. The St. Joseph School District team was composed of an elementary classroom teacher, language arts supervisor, administrator, and myself as the "community scientist." Our team designed a hands-on science action plan for the district and participated in hands-on training sessions using kits produced for various elementary grade levels. During the week, the potential role for physicians in hands-on science education became apparent. As educated scientists, and often the parents of elementary school children, physicians are in a position to encourage hands-on science education. Going beyond encouragement to positive active participation, potential roles for physicians include:

1. Providing science demonstrations for elementary classrooms.
2. Serving as resource persons for elementary science teachers.
3. Assisting in fundraising for hands-on science teaching.
4. Supplying kits for hands-on science projects.
5. Directing the development of a community scientist resource pool.
6. Serving as science fair judges.

Formed by the AMA, the National Initiative on Science and Technology Education is a coalition of professional organizations interested in finding the causes for disinterest and poor performance in science and math, and developing strategies for positive change in science and math education.[6] The AMA strongly encourages physicians to support science educational reform at the local level. The MSMA Council, at the August 1990 meeting, endorsed the hands-on concept of science education for the elementary classroom. Actively promoting hands-on science teaching is a positive way for physicians to be intimately involved in local communities. Urge your school district to form a team and apply to the NSRC for leadership training. Consider volunteering as the community scientist for that team. The address for the center is: National Science Resources Center, National Academy of Sciences-Smithsonian Institution, Arts and Industries Building, Smithsonian Institution, Washington, D.C. 20560, Attention: Ms. Olive W. Covington. Phone: 202/357-2555.

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AUXILIARY MESSAGE

by Carol Sparkman
MSMAA President

> *Auxilians across the country, including our own Janet Campbell, immediate past president of the Southern Medical Association Auxiliary, have worked diligently to see March 30 become a* **national** *Doctors' Day. And finally, the work has paid off and the goal has been reached.*

Doctors' Day Goes National

When Eudora B. Almond suggested that her auxiliary set aside March 30, 1933, to recognize the hard work and dedication of the physicians in her community, little did she imagine that 57 years later, the President of the United States would follow her example and proclaim March 30 National Doctors' Day.

The wife of a physician, Mrs. Almond believed medicine to be the greatest profession on earth, and doctors, the greatest heroes. Her respect and appreciation for physicians and their work prompted her to suggest that her auxiliary set aside a day to honor local doctors. The suggestion met with immediate approval and the auxiliary adopted the following resolution:

"Whereas, the Auxiliary to the Barrow County Medical Society wishes to pay lasting tribute to her Doctors, therefore be it

"Resolved by the Auxiliary to the Barrow County Medical Society, that March 30, the day that famous Georgian Dr. Crawford W. Long first used ether anesthesia in surgery, be adopted as 'Doctors' Day,' the object to be the well-being and honor of the profession, its observance demanding some act of kindness, gift or tribute in remembrance of the Doctors."

In observance of the first Doctors' Day, the members of the Barrow County Auxiliary mailed cards to doctors and their wives in Winder, Ga., and placed flowers on the graves of deceased physicians, including that of Dr. Crawford W. Long, who became the first physician in history to use ether anesthesia in surgery on March 30, 1842.

Over the next two years, other auxiliaries began to follow the example of the Barrow County Auxiliary, and in 1935 the Southern Medical Association Auxiliary passed a resolution recognizing March 30 as Doctors' Day. The resolution was introduced to the Women's Auxiliary to the Southern Medical Association at its 29th annual meeting held in St. Louis, Mo., November 19-22, 1935, by the Auxiliary President, Mrs. J. Bonar White.

Since that time, auxiliaries across the United States have set aside March 30 to show their appreciation for the role physicians play in caring for the sick, advancing medical knowledge, and promoting improved public health. Through the years the red carnation has been used as the symbol of Doctors' Day.

In 1990, legislation was introduced in the House and Senate by Congressmen Mike Parker (D-Mississippi) and G.V. Montgomery (D-Mississippi) and Senator Thad Cochran (R-Mississippi) to establish a national Doctors' Day. Following overwhelming approval by the United States Senate and the House of Representatives, on October 30, 1990, President George Bush

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■ Auxiliary Message

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signed S.J. Res. #366 (which became Public Law 101-473) designating March 30 as "National Doctors' Day." This was the culmination of the efforts of auxilians across the country, led by SMAA presidents, Mrs. Janet Campbell (A.J.), Sedalia, Mo., and Mrs. Roberta Barnett (Jim), Brookhaven, MS. The enactment of this law enables the citizens of the United States to publicly show appreciation for the role of physicians in caring for the sick, advancing medical knowledge, and promoting good health.

Some auxiliaries have recognized the day by donating medical equipment, life line units, or furniture to hospitals or nursing homes; other groups sponsor blood drives or health fairs. "On Doctors' Day it's important for auxilians to become involved in community service projects on a local basis," says Southern Medical Association Auxiliary President Roberta Barnett. "Our involvement shows the public that physicians are interested in and contribute to their local communities."

One of the best ways to recognize Doctors' Day according to Gayanne Burns, chairman of the AMA Auxiliary AMA-ERF Committee, is to make a donation to the American Medical Association Education and Research Foundation in honor of local physicians.

"AMA-ERF is one of the best support systems the medical community has," says Mrs. Burns, "because what we donate to the foundation is given right back to the doctors."

Last year alone, AMA-ERF distributed more than $2 million in contributions to medical schools across the country. The funds were used to finance medical school scholarships and student loan programs; to support programs for women and minority students; to purchase publication subscriptions, computer software, and other equipment; to subsidize student activities, research projects, guest lectures, and attendance at conferences and meetings; and to finance numerous projects that add to the excellence of the medical education experience.

On Doctors' Day, auxilians can recognize individual physicians by making a donation to AMA-ERF in the doctor's name and sending him or her an AMA Auxiliary AMA-ERF All-Purpose Card informing them of the donation. "Or better yet," says Mrs. Burns, "auxiliaries and hospitals can use some of the money they've budgeted for Doctors' Day festivities and events to make a joint donation to AMA-ERF in honor of all the physicians in a particular county, hospital, or medical society." State and county AMA-ERF chairmen can send each physician an AMA-ERF all-purpose card to let them know the donation has been made.

Mrs. Burns also suggests remembering retired physicians in the community by making a donation to AMA-ERF in their names. "We often forget about those doctors who are no longer in practice," Mrs. Burns says, "but they've made an important contribution to medicine, and many of them continue to do so by volunteering at local clinics or by serving on boards and committees of organizations related to health care."

Auxiliary members might also consider making a donation to the foundation in the name of deceased physicians and sending a card to the doctor's widow or widower, since Doctors' Day was set aside to recognize the contributions of all physicians, living and dead.

"When President Bush signed the proclamation declaring March 30 National Doctors' Day, " says Roberta Barnett, "he acknowledged the efforts of auxilians throughout the country to establish a day recognizing the invaluable contributions that physicians have made and continue to make daily to the nation.

The AMA-ERF all purpose card features an embossed AMA-ERF monogram on the cover and contains a general message inside to let the recipient know a donation has been made. In addition to honoring physicians on Doctors' Day, the cards can be used to recognize physician services or special events. To order AMA-ERF All Purpose Cards, contact Becky Moore, AMA-ERF Chairman for Missouri, 2004, East 35th Street, Joplin, MO 64804. ■

PRACTICE MANAGEMENT

by Janice K. Woerth, Ph.D.

Do you have a question for Dr. Woerth? Include your questions along with your name, address and phone number and send them to:

Janice K. Woerth, Ph.D.
Practice Management
c/o *Missouri Medicine*
P.O. Box 1028
Jefferson City, MO 65102
Or call her direct:
816/587-1125

Although your name will not be used in the journal, please include your name and phone number so that Dr. Woerth may contact you if she needs additional information to answer your question.

Dear Dr. Woerth:

On the Explanation of Benefits I receive from Medicare and other insurance companies, some of the surgical services performed are denied payment. For example, I performed reconstructive surgery on a patient whose thumb was amputated in an industrial accident. A sizable amount of the bill was denied payment. I've enclosed the insurance claim form. Was this service correctly billed?

Dr. D.P.

Dear Dr. D.P.:

Your claim is not unusual. The services you performed are listed correctly but are not substantiated with specific diagnoses to establish medical necessity for the procedures. For example, your diagnosis was "complicated open wound of thumb," code 883.1. This code is too general and doesn't accurately describe the patient's problem. The more appropriate code would have been "complicated, traumatic amputation of thumb," code 885.1. This code specifically describes the patient's injury and provides the medical necessity for the surgical procedures performed.

It 's important to be complete and specific when recording a patient's diagnosis. For example, had this patient been diabetic, it would have been important to include that in your diagnosis even though you did not treat the diabetes. Diabetes is an example of a comorbidity. When a patient has a comorbidity that effects your treatment, it should be included in the diagnosis. Notice with the diabetes code that to fulfill Medicare's requirement of coding to the greatest level of specificity, five digits are needed to complete the code. The first three digits of the code (250) indicate that the patient has diabetes. The 4th digit indicates the type of complications with the diabetes the patient has, i.e. diabetes with ketoacidosis, etc. Finally, a 5th digit indicates whether or not the patient is insulin dependent.

Medicare, like many insurances, requires that the diagnosis be specific. In some cases the level of specificity required is dictated by the ICD-9 code. Failure to provide an insurance company with a specific and complete diagnosis can result in reimbursement reduction or denial.

Dear Dr. Woerth:

Due to the nature of my specialty, I spend a great deal of time with the patient's family members discussing the patient's management. I also spend considerable time with nurses, social workers, etc., to coordinate a patient's care. Is there a way to bill for this?

Dr. H.S.

Dear Dr. H.S.:

Yes, there is a way to bill for these services. In the CPT book there are codes for case management services under which these services fall. There are two codes (98900 and 98902) for a medical conference with family member and/or guardian. The appropriate use of the code is based on time spent in conference. There are also two codes (98910 and 98912) for conferences with other health professionals to coordinate activities of patient care. The appropriate use of these codes is also based on the amount of time spent.

Not all insurance companies cover these services. If they are considered a non-covered service by the patient's insurance company, it is the financial responsibility of the patient to pay for the service. ■

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Benefit Provided by a Multi-Electrode Intracochlear Implant to a Prelinguistically Deaf Adult

Laura K. Holden, M.A., Susan M. Binzer, M.A.,
Margaret W. Skinner, Ph.D., and **Margaret F. Juelich, M.S.**
St. Louis, Missouri

The authors describe the therapy and performance of a prelinguistically deaf adult using a multi-electrode, intracochlear implant. The post-operative test results show that this patient receives greater benefit with the cochlear implant than he received with a hearing aid.

The prelinguistic/perilinguistic protocol for the Nucleus 22 Channel Cochlear Implant System is under FDA investigation. Twenty-one centers in the United States are implanting these devices. The centers are gathering data on the efficacy of the implant in this group of patients. This article presents the pre- and post-operative test results of a prelinguistically deaf adult who received the Nucleus 22 Channel Cochlear Implant System. It is important to realize that although the patient cannot understand speech using the implant alone (i.e. without speechreading), he still benefits from the implant.

Case Report

This 39-year-old white man was found to have a profound hearing loss at age 2 years. The exact onset and cause of his deafness are unknown. He wore a hearing aid in his left ear from 4 to 16 years of age. At 16, he stopped wearing the hearing aid (except for television viewing) because the high output of the aid caused nystagmus. He attended St. Joseph's Institute for the Deaf in St. Louis from kindergarten through eighth grade. At the school, he received an oral/aural education including auditory training with his hearing aid, speechreading and speech production training. He then attended public high school and three years of college. For the past several years, he has been a numerical control programmer at McDonnell Douglas Corporation in St. Louis. His excellent speech production and speechreading skills enable him to communicate effectively.

Pre-operative audiological test results revealed that the patient's aided sound-field thresholds were 40-50 dB HL from 250-2000 Hz. No gain was seen above 2000 Hz (Fig 1). On aided speech recognition, sound-only tests, he could not be tested at a normal

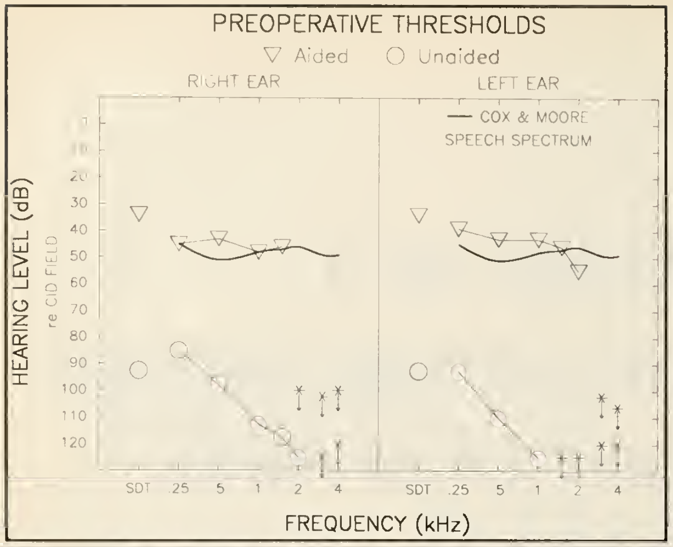

Fig. 1. Pre-operative unaided and aided thresholds for both ears.[1] SDT = Speech Detection Threshold. Asterisk with arrow = No Response.

conversational level of 70 dB SPL because sound was not comfortably loud. Results of pre-operative electrical stimulation of each inner ear indicated that the patient had no adaptation, good dynamic range of sound, excellent gap detection, and no nystagmus. High-resolution CT scans revealed patent cochleas bilaterally. Because the patient had worn a hearing aid in the left ear for 12 years, this ear was chosen for implantation of the device.

The surgery was performed on September 20, 1989. The internal components of the implant consist of the electrode array and receiver/stimulator.[2] All 22 electrodes were inserted into the cochlea, and the receiver/stimulator placed in the mastoid bone. After the operation, the patient experienced dizziness, which subsided several months later.

The patient was fitted with the external components of the implant six weeks after surgery (Fig 2).[3] The external components consist of the microphone, transmitter coil, and speech processor. As shown in Figure 3, sound is picked up by the microphone and sent to the speech processor, where it is coded and returned to the transmitter. The transmitter sends the coded sound through the skin to the receiver/stimulator, which changes it into an electrical signal and sends it to the electrode array. The electrical signal stimulates the hearing nerve, and the brain interprets the signal as sound.

The audiologist programs the speech processor for each patient. The threshold and maximum acceptable loudness (MAL) levels of sound are found for each electrode. All threshold and MAL levels must be equally balanced for loudness across all electrodes. With this information and designation of several other parameters, a MAP or program is created in the speech processor. The first day the patient received electrical stimulation of his implant, he felt as if his head were pulsing in and out. During the second day, he began to perceive the signal as sound instead of a pulsing sensation and could tell the difference between low, medium, and high-pitched sounds.

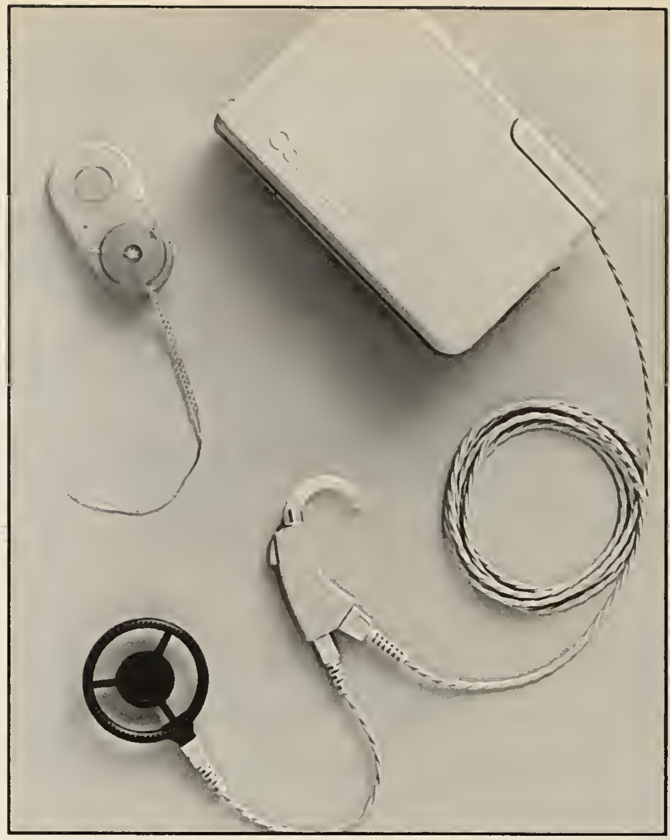

Fig. 2. Nucleus 22 Channel Cochlear Implant System. Internal portion of the implant: receiver/stimulator, and electrode array. External portion of the implant: transmitter, microphone, and speech processor.

During the next four months, the patient returned twice a week for MAP adjustments and therapy. The audiologist balanced the electrodes and made the MAP louder or softer according to his reports of problems in different listening situations. He also received pitch discrimination training. During this four-month period, a new speech processing strategy was approved by the FDA for all cochlear implant recipients. Consequently, the patient's processor was programmed with this new strategy, which allows patients to hear more high-frequency sounds.

Aural rehabilitation therapy included the following: equipment maintenance and management; environmental sound awareness and discrimination; introduction to music; introduction to telephone

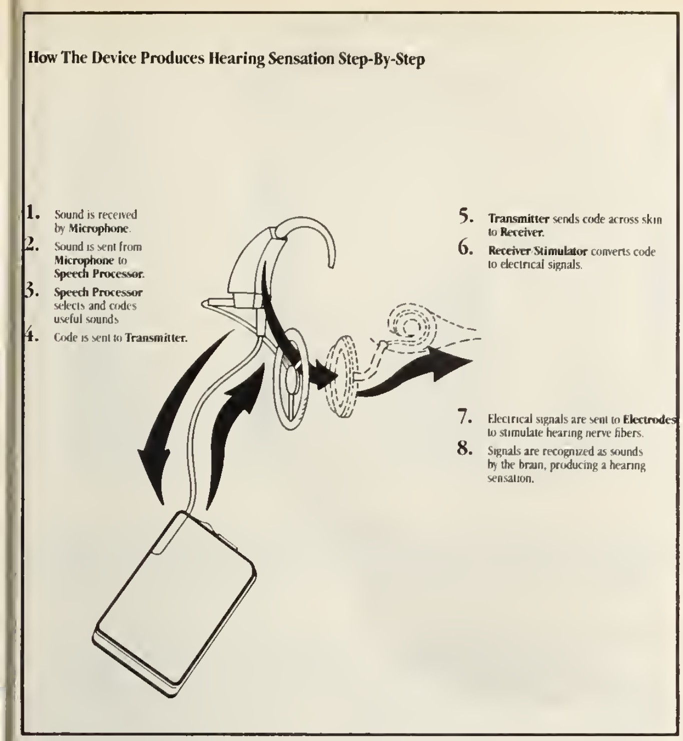
How The Device Produces Hearing Sensation Step-By-Step
1. Sound is received by Microphone.
2. Sound is sent from Microphone to Speech Processor.
3. Speech Processor selects and codes useful sounds
4. Code is sent to Transmitter.
5. Transmitter sends code across skin to Receiver.
6. Receiver Stimulator converts code to electrical signals.
7. Electrical signals are sent to Electrodes to stimulate hearing nerve fibers.
8. Signals are recognized as sounds by the brain, producing a hearing sensation.

Fig. 3. Diagram of how the cochlear implant produces sound.

Table 1
Postoperative Test Results

1. Speech recognition test (sound only):	
CID sentences:	0%
2. Sound-only tests:	
*Noise/Voice	60%
*Spondee Same/Different	80%
Accent	25%
Number of Syllables	54%
*Environmental Sounds	83%
*Four Choice Spondee	60%
*Medial Vowel	42%
Initial Consonant	27%
*Final Consonant	48%
Male/Female	70%
3. *17% increase in enhancement of speechreading CID sentences using the implant.	

* = Tests in which the patient scored above the mean score of the 24 patients participating in this protocol.

use; analytic and synthetic speechreading; and auditory training.

Equipment maintenance and management included instruction in the care and cleaning of the headset, processor, and cords to ensure maximal use and life of the cochlear implant.

Exercises in environmental sound awareness and discrimination consisted of listening to taped environmental sounds in therapy sessions and real environmental sounds for homework. The patient is able to identify a telephone ring, public address system, smoke alarm, police or ambulance siren, and his name. One of his favorite sounds is a pelican's webbed feet on a wooden pier.

Music was discussed and experimented with through the use of a metronome, musical instruments, and cassette tapes. Since getting the implant, the patient has attended the symphony and purchased a portable cassette player that enables him to listen to music at work.

Because the patient cannot understand conversational speech without speechreading, he relies on a Telecommunication Device for the Deaf (TDD) for most telephone use. When his TDD is not available, he can make telephone calls by using a telephone code. The telephone code is based on a patient's ability to identify the number of syllables heard. When making a call, the patient asks questions and the hearing person responds with either a "No" (one syllable), "Yes, Yes" (two syllables), or "Please repeat" (three syllables).

Little analytic speechreading training was done with the patient because his pre-operative speechreading skills were very good. However, vowel and consonant recognition training was conducted weekly in the speechreading alone, speechreading plus sound, and sound alone conditions. The results of pre- and post-operative vowel recognition tests can be seen in Figure 4. Improvements were seen in all three conditions from pre-operative to the four-month post-implantation evaluation. His performance is near perfect using speechreading plus sound. The same general pattern is seen in the consonant recognition study (Fig 5).

The speech tracking procedure[4] is a method of training and evaluating synthetic speechreading. The clinician reads to the patient from a text. The patient then repeats what was said. Any oral strategy, such as repetition, rephrasing, or clarification, may be used to get the patient to repeat the segment verbatim. Tracking sessions were 10 minutes in length and were conducted in the speechreading alone and speechreading plus sound

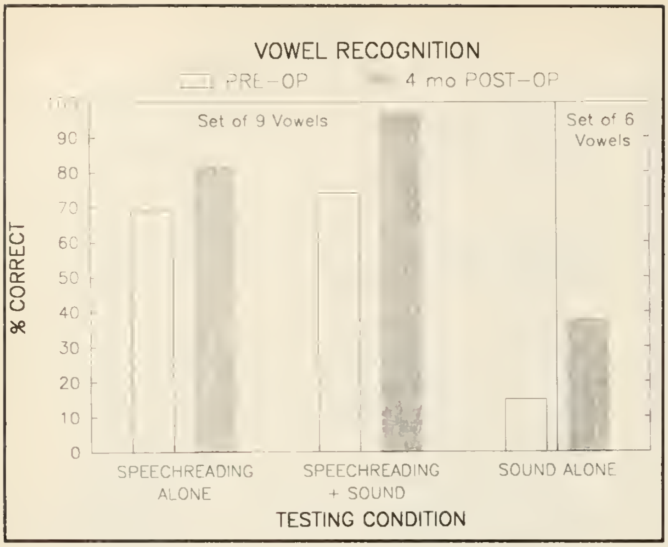

Fig. 4. Vowel recognition results for three conditions.

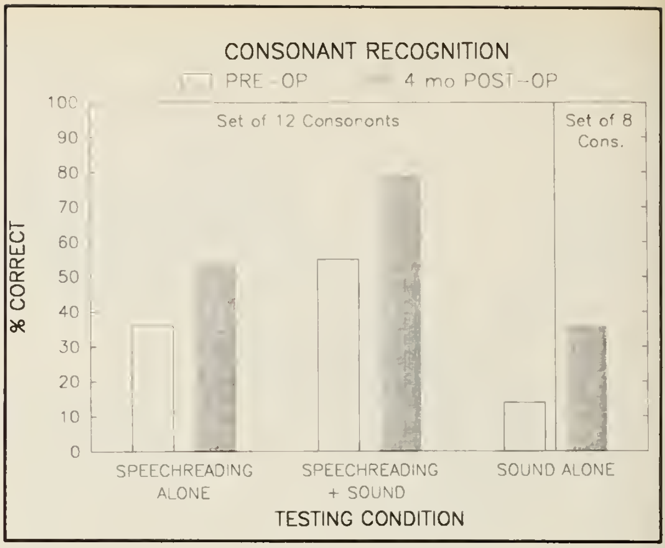

Fig. 5. Consonant recognition results for three conditions.

conditions. Figure 6 shows the patient's progress for both conditions. Each bar represents the average of two 10-minute sessions. With the addition of the implant, an enhancement of 15 words per minute is seen over the speechreading alone condition. The final two bars show the difference score for each condition. The aided difference score is a substantial 26.4 words per minute.

Traditional auditory training tasks are used in aural rehabilitation therapy for cochlear implant recipients. Auditory training consists of five skill levels: detection, discrimination, identification, recognition, and comprehension. Because of the patient's lack of experience with sound, therapy began with

Exploring Sound: A Patient's Perspective

I was found to have a profound hearing loss at two years of age. At the age of four, I was forced to wear a hearing aid by my parents and the teachers at St. Joseph's Institute for the Deaf. I never enjoyed listening with hearing aids. The sound was always unpleasant and the vibrations from the hearing aid made my vision vibrate. It was much more relaxing — and I was happier — in a silent world. I would usually turn the hearing aid off and fool the teachers only pretending to hear.

After 15 years of my not wearing a hearing aid, my parents urged me to try again, thinking technology had improved over the years. I went to an audiologist at Washington University Medical School who after several tests gave me a brochure on cochlear implants. At first I was against the idea. Because of my previous experience with hearing aids, I thought I would go crazy listening to sounds. Besides, I believed my auditory nerve was dead or damaged. But after taking the pre-operative electrical stimulation test, I was totally amazed that I could hear the electrical sound. After that test, I understood more about the sound I would be hearing and was willing to take further tests in order to get the implant.

Before the operation, I didn't have any great expectations as to what the sound was going to be, nor how I would use it. I thought I would learn to accept noise, and I could turn the implant off if I had to. I had expected to turn it off and on quite often.

After the hook-up, I was extremely nervous and fearful of the sounds that I was going to hear. The sounds were weird, not what I expected, and not at all like what I heard through my hearing aid. And I found my prior expectations were wrong. I loved every minute of sound. During the first six months, I had some problems with static, and my MAP had to be adjusted many times, but I enjoyed the sound and never wanted to turn the implant off.

I am amazed at the sounds I can hear. I can identify household sounds, such as the telephone ringing (I have two phones with different rings, and I can identify which phone is ringing), someone knocking

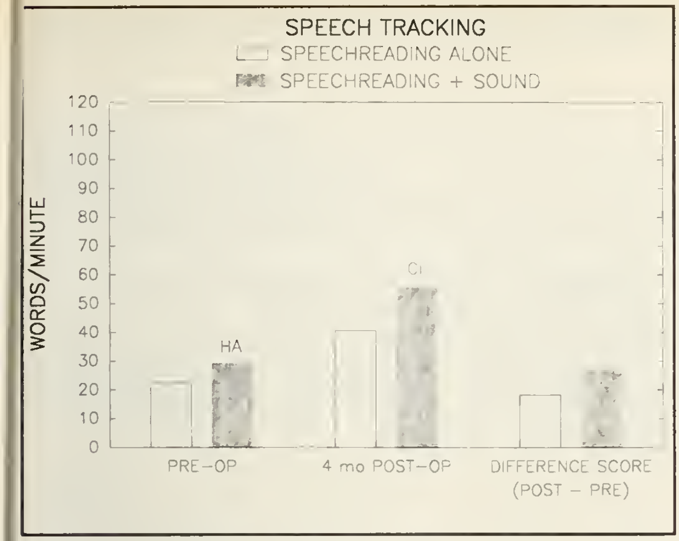

Fig. 6. Pre- and Post-operative speech tracking results for two sessions (averaged).

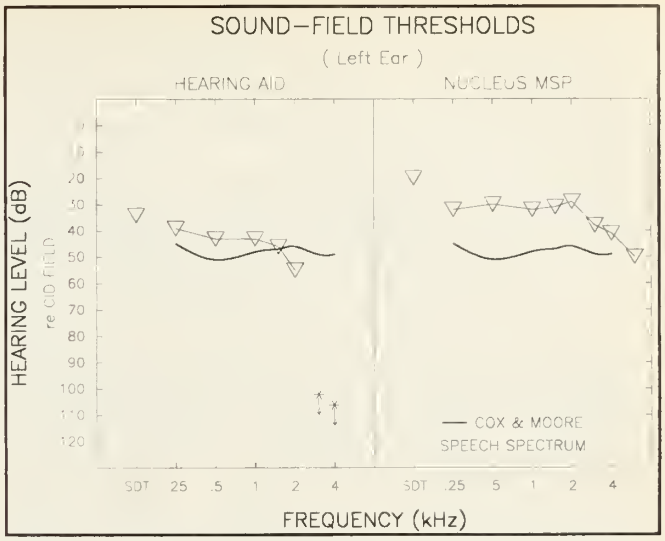

Fig. 7. Comparison of sound-fieid thresholds with a hearing aid and the cochlear implant.

very simple "same or different" discrimination tasks (e.g., deciding, without speechreading, if two sentences were the same or different based on their intonation patterns). He successfully progressed through increasingly difficult tasks in the discrimination level. At the close of his semiweekly therapy, he was able to identify a sentence in a closed set of 10 with 85% accuracy. The jump from closed-set identification to open-set recognition is one only a few prelinguistically deaf implant patients have made. However, in his monthly therapy sessions, the patient is demonstrating pre-recognition level

on the door, my dog's paws on the linoleum floor, the beep of the microwave, and a grapefruit being cut by a knife. There are many soft sounds that I never expected to hear, such as chewing gum, a pencil writing, a highlighter marking paper, a sewing needle dropping on the countertop, ice crunching in my mouth, or the different pitches of the numbers on a push button phone. On one occasion, I was working on my computer at home. I heard a low sound I could not identify. I searched for this sound and discovered it was a jet flying over the house. It was very soft. Before the implant, I would touch the window with my fingers, trying to detect vibrations when jets flew past. As the vibrations were so light, I expected not to be able to hear the sound.

As far as the outside environment, I can identify a siren, birds singing (I'm amazed at how such a tiny animal has a voice so strong), crickets chirping, raindrops on an umbrella, snow crunching when walked on, and cars and trucks.

The "sh," "s," a few other consonants and some vowels are the speech sounds I've learned to recognize. I can hear when a person lets out a faint sigh and can distinguish between some voices.

The implant is especially beneficial to me at work. Some of the benefits are: 1) improved lipreading ability; 2) better control of the intensity of my voice in low and high noise areas; 3) better understanding of my speech by others; 4) being able to hear warning sounds; 5) being able to hear the bar code reader confirming that I have entered the data into the computer; 6) being able to hear the PA system, so I can ask others what was announced; 7) being able to hear telephones ring; 8) being able to hear people talking nearby and therefore feeling less isolated; 9) feeling more a part of the hearing environment; and 10) an increase in my energy and enthusiasm to do my work.

I can't wait to turn the implant on in the morning and I hate to turn it off at night. Almost everyday, I study how sounds work. I am very lucky that I can hear sounds with the implant that I never heard with the hearing aids. I know I will never hear like a normally hearing person, but I love the sounds that I am hearing and prefer it to being deaf.

skills, such as listening for a target monosyllabic word among a list of other monosyllables, and responding affirmatively when he hears the target word. The remainder of his monthly sessions will continue to develop these skills.

At his four-month evaluation, sound-field thresholds with the implant were obtained using warble tone stimuli. His thresholds from 250 to 6000 Hz ranged between 30 and 45 dB HL (Fig 7). On open-set speech recognition tests, he scored 0% when using the implant alone; however, on a battery of closed-set tests (Table 1)[5-6], his scores were significantly above chance (.05 level) on six of eight tests. In contrast to the pre-operative evaluation, all testing was performed at a normal conversational level of 70 dB SPL. On seven tests, he scored better than the mean scores for 24 patients who are participating in this protocol, and on the five remaining tests, he scored at the mean.

Discussion

Although this patient cannot understand speech without speechreading, the test results show that he benefits more from the implant than his hearing aid. Additionally, he reports that sound with the implant is much more comfortable, does not cause nystagmus, and benefits him in many ways in his job and in everyday life. It is also encouraging to see that his performance is improving, and that he may gain some open-set speech recognition in the future.

With the FDA-sponsored protocol for prelinguistically/perilinguistically deaf adults, careful selection of patients is important. A high level of motivation, intelligence, good oral skills, strong support system and willingness to be part of the hearing world are all crucial to success with the implant. If these factors are present, prelinguistically/perilinguistically deaf adults may benefit greatly from a cochlear implant.

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Human Immunodeficiency Virus (HIV) Sero-Prevalence in Sexually Transmitted Disease Clinic Populations

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Kansas City, Missouri
Gregory Stephenson, B.A., and **Darrel Newkirk, M.D., M.P.H.**
Kansas City, Kansas

The authors discuss the results of HIV testing among clients of sexually transmitted disease clinics in the Kansas City Standard Metropolitan Statistical Area as designated by the Centers for Disease Control.

Public health disease surveillance systems are inherently biased. While providing information on disease trends, these systems tend to underestimate the true incidence and prevalence of morbidity. The reasons for the underestimations are many, varying for different diseases and different communities over time. Consequently, devices such as cross-sectional serologic surveys, are used to obtain estimates of the actual incidence or prevalence of a disease at a given time. While these devices provide better estimates, they are considerably more expensive and require more personnel than routine surveillance. In addition, these surveys are also subject to various biases and limitations of interpretation.

With human immunodeficiency virus (HIV) infections, the sentinel event, the development of clinically recognized disease, occurs after a long and variable latency phase (median of 10 years). Tallying cases of acquired immune deficiency syndrome (AIDS), therefore, reflects the historical, not contemporary, epidemiology of HIV infection in the community. Obtaining information on HIV sero-positive, but asymptomatic, individuals is important to assess the progress of the epidemic and to plan and evaluate the community's response. Approximately half of the states require either named, confidential reporting of HIV sero-positive individuals, or anonymous reporting of HIV sero-positive persons without personal identifying information. However, as prevailing public health practice supports only volunteer HIV testing, the surveillance system is as biased as any other passive reporting system for notifiable diseases.

In order to provide better estimates of the prevalence of HIV infection in both high risk and variable risk subsets of the population in geographically defined areas of the country, the Centers for Disease Control (CDC) developed and implemented a group of blinded sero-prevalence surveys in various Standard Metropolitan Statistical Areas (SMSAs). The design of these multi-year surveys has been described else-

Table 1
Sero-prevalence Survey, 1989, for Antibodies Against the Human Immunodeficiency Virus (HIV), Among Clients of Sexually Transmitted Disease Clinics in the Kansas City SMSA

	Kansas City-Wyandotte County, Kansas Health Department		Kansas City, Missouri Health Department	
	# Persons	# Positive (% Positive)	# Persons	#Positive (% Positive)
Males, total	776	6 (0.77)	785	17 (2.17)
White	113	3 (2.65)	148	6 (4.05)
Black	638	3 (0.47)	618	11 (1.78)
Hispanic	25	0	18	0
Other	—	—	1	—
Females, total	503	0	540	0
White	103	0	88	0
Black	390	0	441	0
Hispanic	10	0	9	0
Other	—	—	2	—

where[1] and preliminary results are beginning to be published.[2]

Funding for conducting these federal surveys in the Kansas City SMSA (Johnson, Leavenworth, Wyandotte counties — Kansas; Cass, Clay, Jackson, Platte, Ray counties — Missouri) was awarded to the Missouri Department of Health (MDOH), which in turn sub-contracted the implementation to the Kansas City, Missouri, Health Department (KCMO). With the cooperation of the Kansas City, Kansas — Wyandotte County Health Department (KCKS), these surveys are now being implemented in the Kansas portion of the SMSA. This report describes the results of the first year survey (1989) in the sexually transmitted disease clinics of these two health departments.

Methods

The national CDC survey protocols ensure that all information is collected in an anonymous, blinded fashion. All clinic patients were included in the survey with the exception of persons returning for follow-up visits; persons referred to the clinic as a contact of a known HIV sero-positive individual; and persons seeking only an HIV test. The survey in each clinic ended when a sample of 500 eligible women was obtained. Serum specimens for examination were obtained from blood specimens taken for other purposes in the clinics. No blood was drawn specifically for use in the surveys. By the protocol, all laboratory tests were conducted by the MDOH according to prevailing techniques.

Demographic and risk factor information was obtained on all persons through personal interviews. The data was recorded on prenumbered computer scan forms. The number on the scan form eventually was assigned to the serum specimen, and all other patient identifiers were removed from the serum specimen. The information recorded on the forms was fed into a computer at the KCMO HIV/AIDS Program office. The resultant database was transferred to the MDOH, where the demographic information and test result data were merged. The completed database then was returned to the KCMO HIV/AIDS Program for analysis by clinic site.

Results

The two sero-prevalence surveys resulted in 2,604 individuals (1,561 males; 1,043 females) being tested for the presence of antibodies to HIV (Table 1). While the two clinics were nearly identical in terms of racial/ethnic and sexual demographics of the populations served, the KCKS clinic had a slightly younger clinic population. Of the persons using the KCKS clinic, 28% were under 20 years of age, 46.5% were between ages 20-29, and 25.5% were over 30 years of age. This compares to 17.4%, 49.7% and 32.9% for the respective age groups in the KCMO clinic population. In both clinics, residents of the clinic's state comprised 96% of the clients and residents of the opposite state, 3.6% of the clients. Only six persons out of the 2,604 tested were residents of neither state.

There were 23 HIV sero-positive individuals identified, all residents of Missouri and Kansas, for a combined sero-prevalence rate of 0.88%. There were no HIV sero-positive females; the sex-specific sero-prevalence rate for males was 1.47%. Among the males there was a statistically significant difference (chi square, P = .038) in the sero-prevalence rates of the two clinics, with that for the KCMO clinic being nearly triple that of the KCKS clinic.

Within the racial/ethnic groups of each clinic, only white or black males were sero-positive, with the prevalence rates for white males being 2 to 5.5 times that of black males. For the KCKS clinic, the difference in the sero-prevalence rates between white and black males was statistically significant (Fisher's exact test, P = 0.047), while in the KCMO clinic the difference was not significant. Adjusting the rates for white and black males to the 1980 census of males 15-59 years of age for the SMSA yielded adjusted sero-prevalence rates of 5.9% for white males and 0.7% for black males.

Of the 23 sero-positive males, 20 were between 20 and 39 years of age. Of the remaining three individuals, one was between 15-19 years of age, and two were older than 45 years old. Fifteen of the 23 men were under 30 years of age, and seven of these were younger than 25 years old.

The risk factor information on sero-positive individuals represents the self-declared status of the individual prior to testing. Using the CDC hierarchy of risk factors, 12 individuals were classified as gay/bisexual, two as heterosexual intravenous drug users, and eight individuals as "undetermined" risk status. This information is difficult to interpret, as voluntary HIV testing programs indicate large discrepancies between pre- and post-test risk factor determination for HIV sero-positive individuals. However, approximately 29% of all men who identified themselves as gay or bisexual were sero-positive in both clinics.

Discussion

Besides providing insight on the current status of HIV sero-prevalence, the multi-year design of the CDC surveys should yield data on infection trends among the various subsets of the population. In the Kansas City SMSA, the surveys were initiated in 1989 and involve "high-risk" groups (sexually transmitted disease clinic clients; persons entering methadone treatment) and "variable" groups (women attending reproductive health clinics; newborn infants; patients entering a community hospital for non-HIV related conditions). The available data for 1989 for the "variable" groups revealed sero-prevalence rates of 0-0.1%. For intravenous drug users the rate was 3.4%, but the sample size was very small.

Nationally, the HIV sero-prevalence rates determined for 85 sexually transmitted disease clinics participating in the CDC family of surveys ranged from 0-39%, with 73% of the clinics having rates less than 4%, and 22% with rates less than 1%.[3] Combining the data for the KCKS and KCMO clinic produces a sero-prevalence rate of 0.88%, placing the Kansas City SMSA in the lowest quartile. That all of the HIV sero-positive individuals were males, with a higher rate among whites than blacks, and that the predominant risk factor was being gay or bisexual were not unexpected findings. These observations are consistent with the result of voluntary programs conducted in the clinics.[4] The fact that no sero-positive females were detected illustrates the observed low HIV sero-positivity among women using these clinics. Sero-positive women are detected in extremely low numbers (less than 0.2%) through voluntary testing and as it happened, the survey periods utilized in 1989 did not happen to coincide with clinic visits by sero-positive females.

Approximately 29% of the gay and bisexual men surveyed were sero-positive. This percentage was not significantly different from three other sero-prevalence rates determined for gay or bisexual men using the KCMO clinic: 34.4% in 1985; 39.4% in 1987; and, 30.6% in 1988-1989.[4,5] However, this rate is double that observed for gay or bisexual men using an anonymous HIV counseling and testing site, catering to men of this sexual orientation in Kansas City, Missouri. Thus, for at least the Missouri portion of the SMSA, the level of HIV infection among gay or bisexual men who patronize the public sexually transmitted disease clinics has not increased since 1985.

The sero-prevalence study in the two clinics does illustrate an important issue in the debate concerning named reporting of HIV sero-positive individuals. HIV serologic testing in Missouri is conducted in an environment of legally mandated named reporting and partner notification. For persons who are identified as HIV sero-positive and who continue to practice high risk behaviors, Missouri law allows for criminal felony prosecution. In

Kansas, the law allows reporting of HIV sero-positive persons by various demographic and risk data, without the individual's name and locating information. It is apparent from the results of the survey that the requirements of Missouri law are not sending patients to Kansas to avoid named reporting. This is clearly seen in the information regarding the state of residence of each person surveyed, and further illustrated by the remarkable similarity of the sero-prevalence rates for gay and bisexual men. The results of voluntary testing programs in these two clinics further illustrate this point. Between March 1988 and June 1990, the KCMO clinic tested 29,068 of 30,812 (94%) of its eligible clients and found 260 (0.89%) to be HIV sero-positive. In the KCKS clinic, between July 1988 and June 1990, 2,625 of 6,173 (42%) of the eligible clients were tested with 14 (0.53%) being HIV sero-positive. It is clear that named reporting has little bearing on where persons at high risk of being HIV sero-positive seek their public medical care. Arguments against named reporting because of alleged flight to another state for testing are unsubstantiated. Named reporting and contact or partner notification are critical elements in the public health response to the HIV epidemic, particularly because early medical intervention is now possible.

Summary

Two HIV sero-prevalence surveys conducted during 1989 in public sexually transmitted disease clinics in the Kansas City SMSA tested 1,561 males and 1,043 females. There were 23 sero-positive males; no sero-positive females. The rate for males using the Missouri clinic was nearly triple that of males using the Kansas clinic. Among males the sero-prevalence rate for white males was 8.4 times that for black males. Of the 14 HIV sero-positive males for whom risk factor information was available, 12 were gay or bisexual and two were heterosexual intravenous drug users.

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Gynecomastia

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Gynecomastia is a serious cosmetic concern for many adolescent and adult males. In the majority of cases no pathologic cause for the problem can be found. The authors discuss the types of surgical treatment of gynecomastia.

Gynecomastia is defined as enlargement of the male breast. It is the most common breast lesion in males, accounting for more than 65% of breast disorders.[1] It has been estimated that as many as 75% of adolescents and 40% of adults are affected to some degree.[2,3]

Histopathologically, gynecomastia has a variable picture. In a nonobese adolescent, gynecomastia is usually the result of proliferation of mammary ducts and periductal tissues. In obese individuals, breast enlargement is most often the result of fat deposition. Excess skin can mimic gynecomastia in individuals who have lost significant amounts of weight.[4]

Etiology

In most cases, no pathological cause for gynecomastia can be found. The causes of gynecomastia are classified as either physiological or pathological conditions. These are summarized in Table 1.

Physiologic Gynecomastia

Most male neonates have some enlargement of the breasts, occasionally associated with nipple secretion. This phenonenon is due to the high levels of estrogen transmitted to the fetus from the mother. The condition typically resolves spontaneously in a few weeks. In rare cases, it may persist longer.

Physiological pubertal gynecomastia occurs in approximately 75% of teenage boys, usually between the ages of 13 and 14.[2] In more than 90% of the boys, the condition resolves within a year. This transient development of breast tissue is probably related to the normal development of testicular tissue and a short-lived increase in plasma estrogen relative to plasma testosterone.[5] Excessive adolescent gynecomastia demands a thorough workup to exclude pathological causes, including estrogen-secreting tumors, trophoblastic tumors, hyperthyroidism, or chronic liver disease.[6]

In adults, gynecomastia is associated with increasing age. This is due to the onset of testicular hypofunction and increased adiposity, which enhances the aromatization of androgens to estrogens.[7]

Pathologic Gynecomastia

Pathologic conditions commonly associated with gynecomastia can be classified into conditions of androgen deficiency, estrogen excess, and conditions with an unknown mechanism.

Androgen Deficiency States.

Chronic renal failure, hypogonadism and various drugs diminish androgen levels and can cause gynecomastia.

The exact mechanism leading to gynecomastia in chronic renal failure is unclear; however, many hormonal abnormalities are found in such patients

Table 1
Causes of Gynecomastia

- **Physiologic gynecomastia**
  - Neonatal gynecomastia
  - Pubertal gynecomastia
  - Gynecomastia of aging
- **Pathologic gynecomastia**
  - **Androgen deficiency states**
    - Congenital anorchia
    - Klinefelter's syndrome
    - Enzymatic defects in testosterone synthesis
    - Androgen resistance syndromes
    - Orchitis
    - Trauma or castration
    - Granulomatous diseases (especially lepromatous leprosy
    - Myotonic dystrophy
    - Renal failure
    - Alcoholism
  - **Estrogen excess states**
    - Testicular tumors
    - Bronchogenic carcinoma
    - True hermaphroditism
    - Adrenal disease
    - Liver disease
    - Malnutrition
- **Thyrotoxicosis**
- **Drugs** *(See Table 2)*
- **Unknown mechanisms**
  - Giant pigmented nevus
  - Adrenogenital syndrome
  - Adrenocorticotropic hormone (ACTH) deficiency
  - Thoracoplastic surgery
  - Herpes zoster infection
  - Human immunodeficiency virus (HIV) infection
  - Pituitary tumor
  - Cystic fibrosis
- **Familial gynecomastia**
- **Idiopathic gynecomastia**

that could account for the development of gynecomastia. Typically, serum testosterone levels are low and luteinizing hormone (LH) levels are high. High levels of LH stimulate estrogen production by the testes, leading to a relative deficiency in testosterone.[8]

Hypogonadism produces breast enlargement as a result of decreased serum testosterone levels. Klinefelter's syndrome is a congenital cause of hypogonadism that occurs in 1 of 500 male births. Acquired causes of hypogonadism — including viral orchitis, trauma, granulomatous diseases of the testes and neurologic disorders such as myotonic dystrophy — may also lead to gynecomastia.[9]

Many drugs may inhibit testosterone biosynthesis or its action and cause an androgen deficiency.

Gynecomastia is common in chronic alcoholics, who experience testicular atrophy, liver disease or both. In healthy young men, acute ingestion of ethanol lowers serum testosterone levels. Ethanol is metabolized to acetaldehyde, which directly inhibits testosterone production. Ethanol also increases estrogen levels and estrogen tissue receptors.[10]

Gynecomastia occurs in approximately 1% of male patients taking cimetidine.[11] Cimetidine appears to block the androgen receptors that suppress breast tissue growth.[12] Ranitidine, another H_2 receptor blocker, has produced isolated cases of gynecomastia.[13,14]

Spironolactone in doses of 50 to 200 mg/day can cause gynecomastia by inhibiting androgen binding to breast tissue receptors, inhibiting testosterone biosynthesis, increasing testosterone clearance, and enhancing peripheral conversion of testosterone to estrogen.[8]

Ketoconazole is a potent inhibitor of testosterone biosynthesis and may cause breast enlargement if given in doses exceeding 800 to 1,200 mg/day.[15]

Estrogen Excess States.

Malnutrition, liver disease, hyperthyroidism, testicular and nontesticular tumors, and various drugs can produce estrogen excess and gynecomastia.

Obesity-induced gynecomastia is due to the increase in adipose tissue.[16] In contrast, gynecomastia may also result from malnutrition caused by starvation or prolonged illness.[17] Gynecomastia following starvation usually regresses after several months of adequate nutritional intake.

Liver disease, particularly cirrhosis, is often associated with gynecomastia. In these cases, diminished hepatic degraduation of androgen precursors with increased peripheral conversion to estrogen is the usual cause of breast enlargement.[18]

Gynecomastia develops in 20% to 40% of patients with hyperthyroidism because of elevated serum estrogen levels.[19] Gynecomastia usually resolves once euthyroidism is achieved.

Gynecomastia is associated with less than 10% of testicular tumors.[20] Germinal cell testicular tumors produce human chorionic gonadotropin (HCG), which stimulates Leydig cells to produce excess estrogen.

Adrenal tumors, hepatomas, bronchiogenic carcinoma, pancreatic carcinoma, and gastric carcinoma have all been associated with gynecomastia but are extremely rare causes of breast enlargement.[21]

Gynecomastia also develops in men undergoing

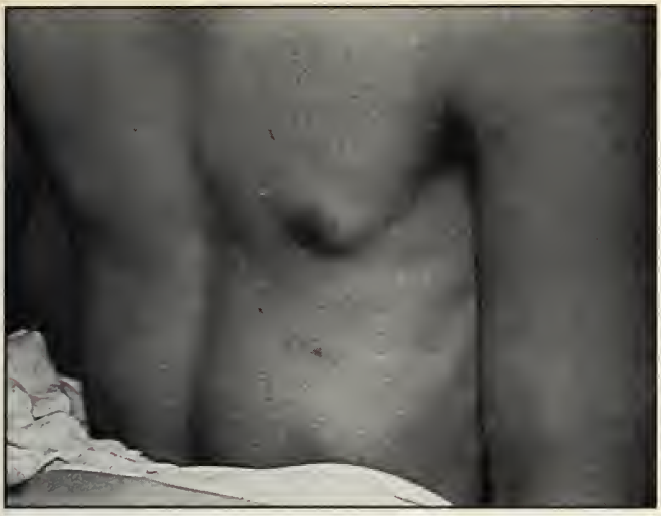

Fig 1A. Gynecomastia in a 16-year-old boy.

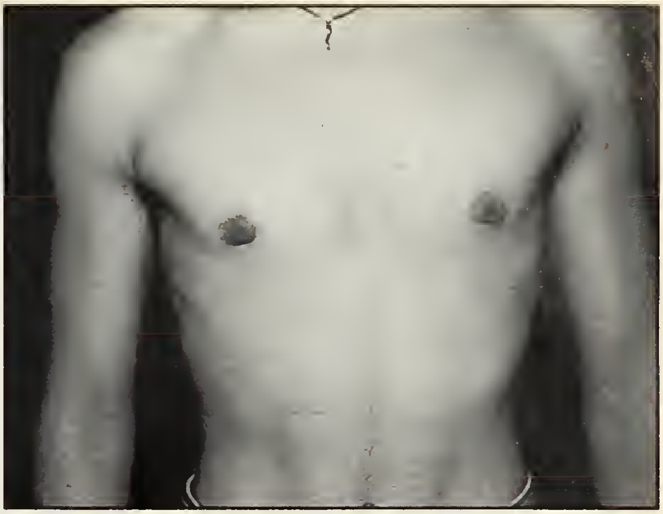

Fig 1B. Same 16-year-old boy six months postoperatively. Treated by direct surgical excision.

treatment with diethylstilbestrol for prostate cancer and in transexual men treated with estrogen compounds. Gynecomastia has also been found in pharmaceutical workers involved in the manufacture of estrogen-containing compounds.

Unknown Mechanism.

Digitalis derivates, such as digitoxin and digoxin, cause gynecomastia through unknown mechanisms.[16]

A variety of pulmonary conditions including tuberculosis, chronic obstructive pulmonary disease, cystic fibrosis, and hypertrophic pulmonary osteoarthropathy are related to gynecomastia.[21,22]

Some tricyclic antidepressants, benzodiazepines, and phenothiazines cause gynecomastia. In addition, the use of marijuana, and some narcotic drugs has been associated with gynecomastia.[23]

Chest wall trauma and psychological stress may also lead to gynecomastia.[21]

Gynecomastia without apparent endocrinopathy has been reported in several families, suggesting heredity may be a factor.[24]

Table 2
Drugs Related to Gynecomastia

- Estrogens
- Androgens
- Human chorionic gonadotropin
- Spironolactone
- Methyldopa
- Cimetidine
- Digitalis
- Isoniazid
- Phenothiazines
- Amphetamines
- Diethylproprion
- Reserpine
- Marijuana
- Tricyclic antidepressants
- Diazepam
- Cytoxic Agents
  - Busulfan
  - Vincristine
  - Nitrosoureas
  - Combination chemotherapy

Evaluation

Evaluation of the patient with gynecomastia must include a thorough history and physical examination. One should attempt to determine the existence of any concurrent diseases. Especially important are childhood diseases such as mumps, which is the most common cause of testicular failure in the young adult. In adults, one should determine the existence of medical problems such as cirrhosis or alcoholism, or any past malignancy, such as prostatic cancer. It is important to obtain a record of drug usage in all age groups. The patient should also be asked about exposure to environmental hazards, including indirect exposure to endocrinologically active substances.

On physical examination the presence or absence of testicles, their size and consistency, should be determined. A thorough examination of the neck for thyroid size and of the abdomen for any organomegaly — in particular, an enlarged liver, which could indicate

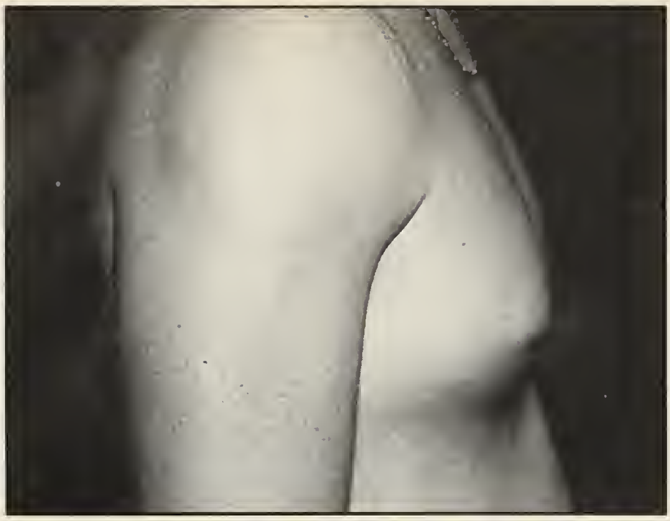

Fig 2A. Gynecomastia in an 18-year-old.

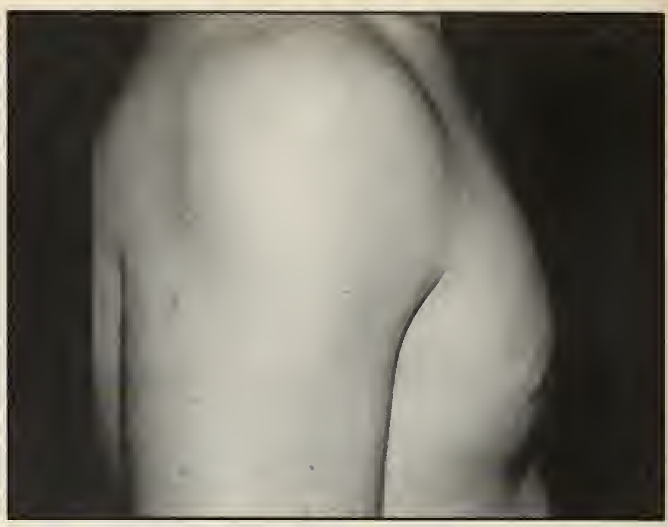

Fig 2B. Same 18-year-old postoperatively. Treated by direct excision and suction-assisted lipectomy.

alcoholism — should be performed. A biopsy of lesions suggestive of breast cancer should be obtained. The physical examination will be normal or nondiagnostic in most patients except those with atrophic testicles secondary to mumps.

Laboratory evaluation for gynecomastia is usally needed only when there is a positive finding in either the history or physical examination. If the patient has a Marfanoid habitus and is thin with small testicles, Klinefelter's syndrome should be considered a possibility and a buccal smear obtained to confirm the diagnosis. If the patient is an adult who did not have gynecomastia as an adolescent, is not obese and develops gynecomastia between the ages of 16 and 27, there is a significant risk that a pathological condition or drug is causing the gynecomastia. If the drug history is negative and there is no obvious cause for the gynecomastia, a variety of screening tests including liver function tests, renal function tests, chest radiographs, urinary 17-ketosteroids, serum estrogen, testosterone, follicle stimulating hormone, LH, and HCG should be measured.

Treatment

The medical treatment of gynecomastia has been uniformly unsuccessful. The use of drugs such as tamoxifen does not reduce the breast enlargement, and discontinuation of medications which may have originally caused the gynecomastia does not result in regression of the breast tissue.[25] Surgical treatment in the past consisted of direct excision of the breast tissue, usually through either a periareolar incision or an axillary incision.[26,27,28] The results of direct surgical excision were often disappointing because of frequent contour irregularities. With the advent of suction-assisted lipectomy, there has been a substantial improvement in results.[29]

Currently, there are four ways of approaching gynecomastia. One is direct surgical excision, which should be reserved for the thin adolescent male in whom there is essentially only glandular hypertrophy and no excess fat (Figs 1A and 1B). With direct surgical excision a periareolar incision is made and the areola freed from the underlying breast tissue, leaving approximately 5 to 7 mm of breast tissue immediately beneath the areola to provide for some areolar projection. If this is not done, the areola will appear sunken and is an obvious indication of surgical alteration of the breast. Once the nipple and the areola are freed from the underlying breast tissue, that tissue can be excised, taking care to bevel the edges of the resection at the periphery of the breast tissue. The use of facelift scissors helps establish the proper plane between the breast tissue and the subcutaneous tissue and slide between that and the adjacent fat. These resections leave a cavity beneath the skin flaps and should always be drained with continuous suction to avoid either seroma or hematoma.

Direct excision and suction-assisted lipectomy. The combination of excision and suction lipectomy should be used for patients who have some glandular tissue beneath or adjacent to the areola, and a significant amount of fat (Figs 2A and 2B). It is usually best to begin with suction-assisted lipectomy through a small periareolar incision. The suction cannula can be passed underneath the subcutaneous tissue flaps and will usually not penetrate the breast parenchyma. This allows rapid elevation of the flaps from the breast tissue and allows resection of the necessary fat at the periphery. The fat is removed gradually. With larger diameter cannulas, of course, the fat is more rapidly

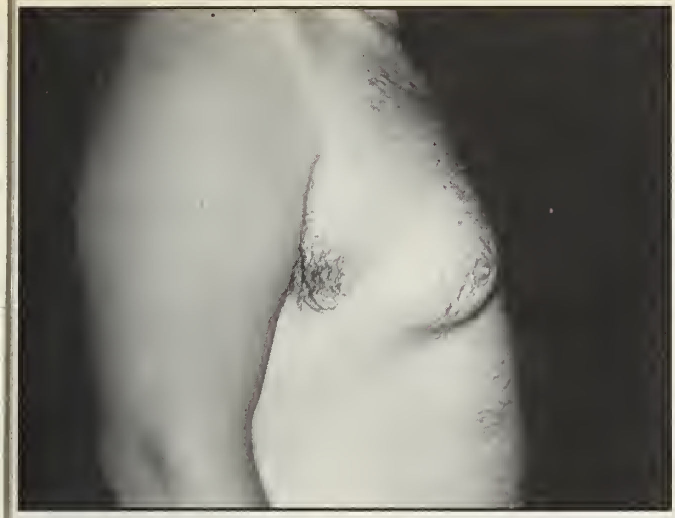

Fig 3A. Gynecomastia in a moderately-obese 45-year-old.

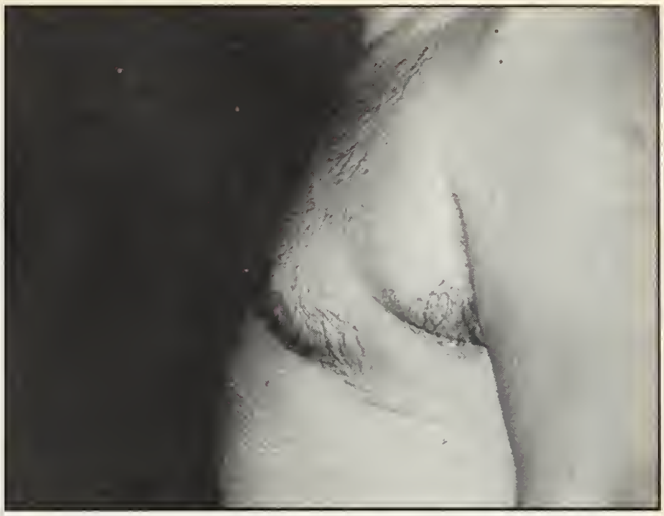

Fig 3B. Same 45-year-old postoperatively. Treated by suction-assisted lipectomy alone.

removed, increasing the risk of contour irregularities. Once the excess fat has been removed, the breast parenchyma is removed by direct excision, again elevating the areola and nipple with a 5 to 7 mm thick component beneath to pad it. At this point, the remaining attachments between the breast parenchyma and the subcutaneous fat can be easily divided with the facelift scissors, hemostasis obtained with the electrocautery, and the breast parenchyma either hemisected or divided into quadrants and removed. Any remaining contour irregularities can then be adjusted by suction-assisted lipectomy. The wounds should be drained with continuous suction to prevent the formation of hematoma or seroma.

Suction-assisted lipectomy only. In obese patients, the breast is often composed almost totally of fat (Figs 3A and 3B). These patients can be treated by suction-assisted lipectomy alone, using either a periareolar or an axillary incision. The axillary incision has the advantage of leaving no scar on the chest itself and, hence, no stigmata of breast surgery. These cases should usually be done on an outpatient basis under general anesthesia and rarely require transfusion. Although the wound can be drained, it is not essential. The cannula is introduced through small incisions and the breast mound gradually recontoured using both palpation and inspection to determine when an adequate resection has been performed. Following lipectomy, there is often significant swelling for the first month postoperatively. This gradually resolves over four to five months. Bruising may last for up to six weeks.

Skin excision and nipple grafting. Direct skin excision is rarely indicated even when the breasts are ptotic. This is especially true in the adolescent and young adult, whose skin elasticity is good. However, skin excision may be required in individuals with massive weight loss who have both an excess of breast tissue and a large excess of skin (Figs 4A and 4B). In these individuals it is often best to perform a direct skin excision, leaving a transverse scar, and then free nipple grafting as opposed to a nipple transposition procedure.

The results of all of the techniques can be excellent if properly performed in properly selected patients. Complications generally include contour irregularities and incomplete correction of the gynecomastia. Nipple-areolar and skin necrosis have been reported in cases in which nipple-areolar transposition on skin and subcutaneous tissue pedicles have been attempted. These techniques, plus direct excision and free nipple grafting, can also result in hypertrophic scars. Using the other techniques, hypertrophic scars are not common, even in blacks.

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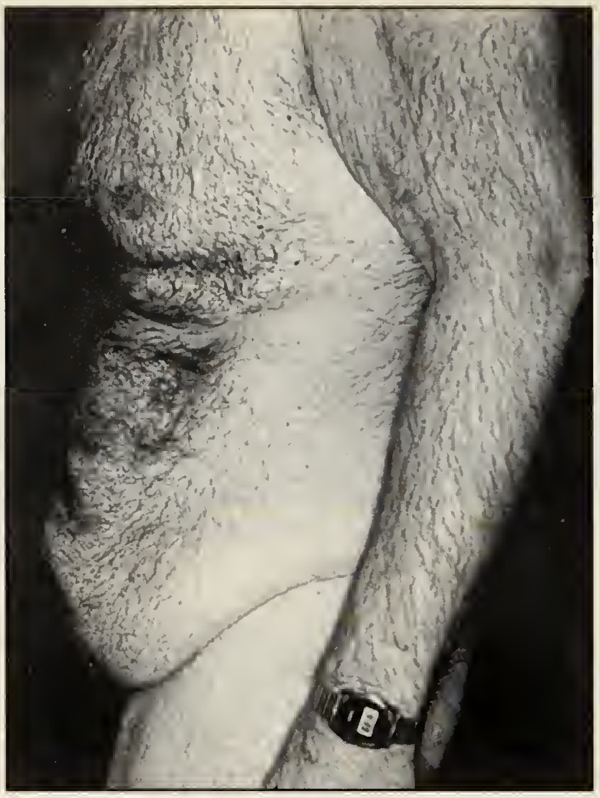

Fig. 4A. Gynecomastia in a 50-year-old following massive weight loss.

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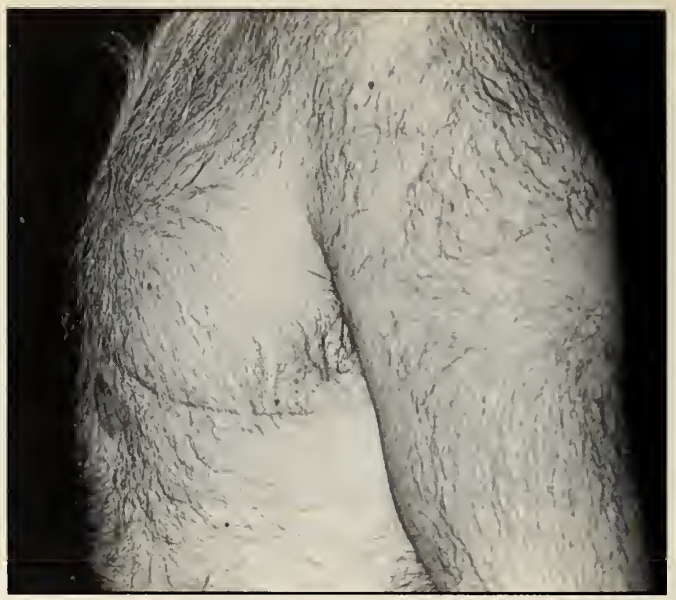

Fig. 4B. Same 50-year-old postoperatively. Treated by skin excision and nipple grafting.

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The Authors

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Reprints

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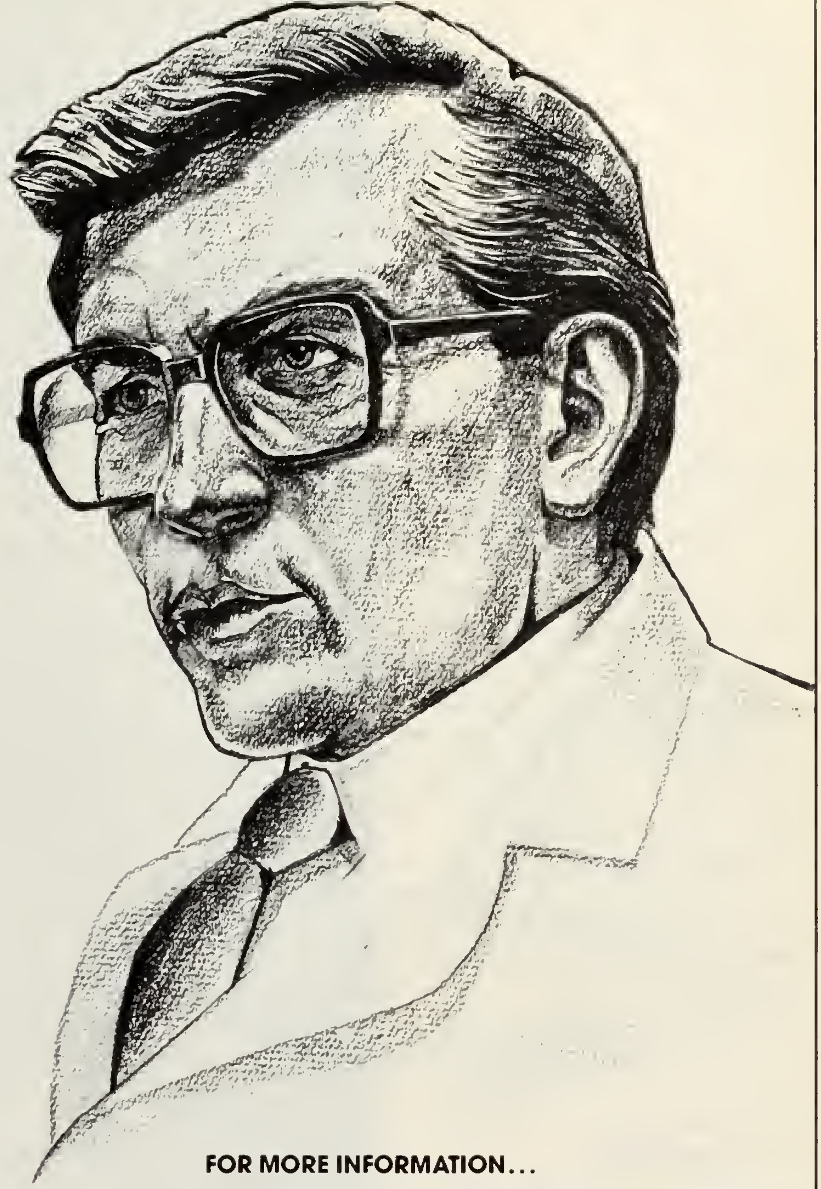

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133rd Annual Convention
April 3 - 7, 1991
Crown Center, Kansas City

Preliminary Program

Scientific Program

(listed alphabetically by sponsoring specialty)

ALLERGY

Saturday, April 6

7:30 a.m. Missouri State Allergy Association Executive Committee Breakfast

8:25 a.m. Scientific Program

"Treatment of Allergic Rhinitis and Asthma During Pregnancy"
Speaker: Michael Schatz, M.D.
Southern California Permanente Group, San Diego, CA

"Corticosteroid Therapy: Common and Not So Common Complications"
Speaker: Allan Luskin, M.D.
Professor of Medicine, Associate Attending in Pediatrics; Associate Professor of Immunology and Microbiology, Rush-Presbyterian-St. Luke's Medical Center, Chicago, IL

"Chronic Rhinitis: Approach to the Differential Diagnosis"
Speaker: Michael Schatz, M.D.
San Diego, CA

12:00 noon Missouri State Allergy Association Luncheon and Business Meeting

1:30 p.m. Scientific Program

"Mold Allergy: Diagnosis and Treatment (1991)"
Speaker: Jay Portnoy, M.D., Kansas City

"Drug Allergy: Diagnosis and Treatment (1991)"
Speaker: Allan Luskin, M.D.
Chicago, IL

"The Adolescent and Asthma: How to Enhance Understanding and Compliance"
Speakers: Ester Mergerman, Ph.D.
Marcia Biel, Ph.D.
Kansas City, KS

4:30 p.m. Missouri State Allergy Association Reception

Sponsored by the Missouri State Allergy Association

ANESTHESIOLOGY

Friday, April 5

6:30 p.m. Missouri Society of Anesthesiologists Reception and Dinner

Saturday, April 6

8:00 a.m. Missouri Society of Anesthesiologists Continental Breakfast

8:15 a.m. Scientific Program

"New Intravenous Anesthetics"
Speaker: Paul F. White, Ph.D., M.D.
Professor and Assistant Chairman of Clinical Research, Department of Anesthesiology, Washington University Medical Center, St. Louis

"New Volatile Anesthetics"
Speaker: Edmund I. Eger, M.D.
Professor and Vice Chairman for Research Science, University of California, San Francisco

"Nitrous Oxide"
Speaker: Edmund I. Eger, M.D.
San Francisco, CA

12:00 noon Missouri Society of Anesthesiology Luncheon and Business Meeting

1:00 p.m. Scientific Program

"Update on Transfusion Practices"
Speaker: E.E. Fibuch, M.D.
Professor and Vice Chairman, Department of Anesthesia, St. Luke's Hospital, University of Missouri-Kansas City School of Medicine

"New Neuromuscular Blocking Drugs"
Speaker: Cynthia Lein, M.D.
New York Hospital, Cornell Medical Center, New York

"New Modalities in Pain Therapy"
Speaker: E.E. Fibuch, M.D., Kansas City

9:30 a.m.-3:30 p.m. Missouri Society of Anesthesiologists Social Program

6:00 p.m. Missouri Society of Anesthesiologists Dinner at Benton's Steak and Chop House

8:00 p.m. Missouri Society of Anesthesiologists Social Program

Sponsored by the Missouri Society of Anesthesiologists

DERMATOLOGY

Friday, April 5

1:30 p.m. Scientific Program

"Chemical Face Peeling in the '90s"
Speaker: Edwin A. Cortez, M.D., Kansas City

"Unusual Presentations of Eyelid Tumors"
Speaker: Glenn Goldstein, M.D.
Director of Skin and Mohs Surgery Center, Kansas City

"Improved Cosmetic Results Using the Dermal Loop Suture"
Speaker: Robert Durst, M.D., Topeka, KS

"Update on Retinoids"
Speaker: James Kalivas, M.D.
Professor and Chief of Dermatology, University of Kansas Medical Center

"Update and Management of Condylomata in Males"
Speaker: Mark McCune, M.D.
President of Kansas City Dermatology and Skin Surgery Center, Overland Park, KS

"Cutaneous Signs of AIDS in Kansas City"
Speaker: John Hall, M.D., Kansas City

"Midwest Mystery Cases"
Speakers: Bill Ketcham, M.D.
Lisa Waxman, M.D.
Rex Largen, M.D.
Resident Physicians,
Kansas University

5:00 p.m. Missouri Dermatological Society, Inc. Board Meeting

Saturday, April 6

9:00 a.m. Scientific Program

"Noninfectious Causes of Fever and Rash"
Speaker: Warren Heymann, M.D.
Division of Dermatology, University of Medicine and Dentistry of New Jersey, Robert Wood Johnson Medical School at Camden, Marlton, NJ

"Systemic Manifestations of Common Dermatoses"
Speaker: Warren Heyman, M.D.
Marlton, NJ

"What's New in Dermatopathology"
Speaker: James Fitzpatrick, M.D.
Chief of Dermatology Section,
Fitzsimmons Army Medical Hospital
Aurora, CO

1:45 p.m.	Scientific Program
	"Psychodermatology: Differential Diagnosis and Treatment" Speaker: John Koo, M.D. Director of Psoriasis Treatment Center and Phototherapy Unit; Psychodermatology Clinic and Drug Research Unit, UCSF Medical Center, San Francisco, CA
	"Management of Resistant Bacterial Infections" Speaker: James Fitzpatrick, M.D. Aurora, CO
	"Management of Treatment Resistant Psoriasis" Speaker: John Koo, M.D. San Francisco, CA
6:00 p.m.	Missouri Dermatological Society, Inc. Installation of Officers
7:00 p.m.	Missouri Dermatological Society, Inc. Cocktail Reception and Dinner

Sunday, April 7

11:00 a.m.	Missouri Dermatological Society, Inc., Business Meeting

Sponsored by the Missouri Dermatological Society, Inc.

EMERGENCY PHYSICIANS

Saturday, April 6

9:00 a.m.	Scientific Program
	"Bio-Rhythms and Shift Work" Speaker: Mark Steele, M.D. Vice-Chairman, Department of Emergency Medicine, University of Missouri-Kansas City
	"Risk Management" Speaker: Mary Lee Heim, M.D. Assistant Professor, Director, Medical Student Clerkship, University of Missouri-Kansas City
12:00 noon	Board of Directors Meeting & Luncheon

Sponsored by the Missouri Chapter, American College of Emergency Physicians

FAMILY PHYSICIANS

Saturday, April 6

11:00 a.m.	Scientific Program
	"Health Care Self Determination, Living Wills, Death and Dying" Speaker: Lawrence A. Rues, M.D. Associate Director, Goppert Family Care Center, Kansas City
1:30 p.m.	Scientific Program
	"Early Diagnosis, Management, and Proper Referral of Diabetic Retinopathy" Speaker: George Bohigian, St. Louis

Sponsored by the Missouri Academy of Family Physicians

INTERNAL MEDICINE

Saturday, April 6

12:00 noon	Missouri Society of Internal Medicine Resident Luncheon
1:00 p.m.	Missouri Society of Internal Medicine Council Meeting

Sponsored by the Missouri Society of Internal Medicine

NEUROLOGICAL

Saturday, April 6

1:00 p.m.	Scientific Program "Neuro-imaging" Speaker: William Crowley, M.D. Chairman, Department of Neurology, University of Missouri Health Science Center, Columbia
2:30 p.m.	Missouri State Neurological Association Reception

Sponsored by the Missouri State Neurological Association

NEUROSURGICAL

Saturday, April 6

12:00 noon	Missouri State Neurosurgical Society Luncheon and Business Meeting

Sponsored by the Missouri State Neurosurgical Society

OPHTHALMOLOGY

Saturday, April 6

8:00 a.m.	Scientific Program "PRO and Ophthalmological – How to Avoid Problems" Speaker: Charles B. Slonim, M.D. Medical Director, Professional Foundation for Health Care Inc. (Florida State PRO); Professor of Ophthalmology, University of South Florida, Tampa
10:00 a.m.	Resident Papers
12:00 noon	Luncheon and Business Meeting
1:30 p.m.	Resident Papers
5:00 p.m.	Eye Foundation of Kansas City Reception

Sponsored bythe Missouri Ophthalmological Society, Inc.

OTOLARYNGOLOGY

Saturday, April 6

7:00 a.m.	Missouri Society of Otolaryngology-Head and Neck Surgery Breakfast Meeting
8:25 a.m.	Scientific Program "Reconstruction of Facial Defects" "Skin Grafts in Facial Reconstruction" Speaker: Edwin A. Cortez, M.D. Director, Cortez Facial Plastic Surgery, P.C., Kansas City "Local and Regional Flaps in Facial Reconstruction" Speaker: J. Regan Thomas, M.D., St. Louis "Reconstruction in Hair-Bearing Areas" Speaker: Kenneth A. Buchwach, M.D. Kansas City "Tissue Expansion in Facial Reconstruction" Speaker: Tamara K. Ehlert, M.D., St. Louis "Historical Perspectives in Facial Reconstruction" Speaker: Richard T. Farrior, M.D. Clinical Professor of Otolaryngology-Head and Neck Surgery, University of Florida & Southern Florida University, Tampa "Nasal Reconstruction Using Flaps" Speaker: Keith A. LaFerriere, M.D. Clinical Assistant Professor of Surgery, Department of Otolaryngology-Head and Neck Surgery, University of Missouri, Springfield

"Injectable Materials and Implants"
Speaker: Gregory Branham, M.D.
Director of Facial Plastic Surgery, Department of Otolaryngology-Head and Neck Surgery, St. Louis University

"Musculocutaneous, Compound and Free Flaps in Facial Reconstruction"
Speaker: Michael D. Maves, M.D.
Professor and Chairman, Department of Otolaryngology-Head and Neck Surgery, St. Louis University

Sponsored by the Missouri Society of Otolaryngology-Head and Neck Surgery

PATHOLOGY

Saturday, April 6

9:00 a.m.	Missouri Society of Pathologists Continental Breakfast
10:00 a.m.	Scientific Program "Quality Control of Immunoperoxidase Techniques" Speaker: Mark R. Wick, M.D. Division of Surgical Pathology, Barnes Hospital, Washington University Medical Center, St. Louis "Practical Applications of Immunoperoxidase Techniques in Selected Cases" Speaker: Mark R. Wick, M.D., St. Louis
12:00 noon	Missouri Society of Pathologists Luncheon & Business Meeting
2:00 p.m.	Missouri Society of Pathologists Board of Directors Meeting

Sponsored by the Missouri Society of Pathologists

PHYSICAL MEDICINE AND REHABILITATION

Saturday, April 6

9:00 a.m.	Scientific Program "Expansion/Contracture of Patient Population in Physical Medicine and Rehabilitation" Speaker: Leon Reinstein, M.D. Vice-President, Academy of Physical Medicine and Rehabilitation, Chicago, IL "Health Care Finance in the 1990s With Regard to Patients in Physical Medicine and Rehabilitation" Speaker: Leon Reinstein, M.D. Chicago, IL
12:00 noon	Central Society of Physical Medicine and Rehabilitation Board Luncheon and Business Meeting
1:00 p.m.	Scientific Program "Fibromyalgia: A Team Approach" Speaker: Robert Conway, M.D. Associate Clinical Professor, University of Missouri-Columbia

Sponsored by the Central Society of Physical Medicine and Rehabilitation

PLASTIC SURGERY

Friday, April 5

2:00-4:00 p.m.	Scientific Program
7:00 p.m.	Missouri Association of Plastic and Reconstructive Surgeons Reception
8:00 p.m.	Missouri Association of Plastic and Reconstructive Surgeons Dinner

Saturday, April 6

7:00 a.m.	Missouri Association of Plastic and Reconstructive Surgeons Board of Directors Meeting

7:30 a.m.	Missouri Association of Plastic and Reconstructive Surgeons Continental Breakfast
8:00 a.m.	Missouri Association of Plastic and Reconstructive Surgeons Business Meeting
9:00- 11:00 a.m.	Scientific Program

Sponsored by the Missouri Association of Plastic and Reconstructive Surgeons

PSYCHIATRY

Friday, April 5

1:00 p.m.	Scientific Program "Update in Psychiatry" "Conduct Disorder in Adolescents" Speaker: Thomas D. Eppright, M.D. Child Fellow, Department of Psychiatry, University of Missouri-Columbia "Panic Disorder and Its Importance for Non-Psychiatrists" Speaker: Stuart Munro, M.D. Director of Education, Department of Psychiatry, University of Missouri-Kansas City School of Medicine

Sponsored by the Missouri Psychiatric Association

RADIOLOGY

Saturday, April 6

8:00 a.m.	Missouri Radiological Society Breakfast
9:00 a.m.	Nominating Committee Meeting
10:00 a.m.	Board of Directors Meeting
12:30 p.m.	Missouri Radiological Society Luncheon
1:30 p.m.- 4:30 p.m.	Socio-Economic Presentation
4:30 p.m.	Annual Membership Meeting and Election of Officers
5:30 p.m.	Missouri Radiological Society Reception

Sponsored by the Missouri Radiological Society

SURGERY

Thursday, April 4

6:00 p.m.	Missouri State Surgical Society Board of Directors Cocktail Reception

Friday, April 5

9:30 a.m.	Scientific Program "Trauma" "Reimbursement For Trauma Patients...Is It Realistic?" Speaker: Marc Shapiro, M.D., St. Louis "The Role of CT Scanning in Trauma Management" Speaker: Timothy Fabian, M.D., Memphis, TN "The State Trauma System...Today and in the Future" Speaker: Frank Mitchell, M.D., Columbia
1:00 p.m.	Scientific Program "Federal Government and the Surgeons" "Profiling: What Does It Mean To You?" Speaker: William Bradshaw, M.D., Kansas City "The Physicians' Fee Schedule: What Will We Earn?" Speaker: Frank Mohs, M.D., St. Louis

"The National Physician's Data Bank"
Speaker: Robert Harmon, M.D.,
Washington, D.C.

Saturday, April 6

7:00 a.m.	Missouri State Surgical Society Breakfast Session
	"Thyroid Cancer" Speaker: Debra Koivunen, M.D., Columbia
	"Management of Rectal Cancer" Speaker: Phil Robbins, M.D., St. Louis
8:45-10:45 a.m.	Scientific Program "Laparoscopic Surgery"
	"Laparoscopic Cholecystectomy" Speaker: David Meiners, M.D., St. Louis
	"Laparoscopic Appendectomy" Speaker: Walter Peters, M.D., Columbia "Complications of Laparoscopic Surgery: In Particular Cholecystectomy" Speaker: Joseph Petelin, M.D., Shawnee Mission, KS

Sponsored by the Missouri State Surgical Society

11:00 a.m.	Scientific Program "Expert Witness and Professional Liability Information" Speaker: Michael J. Bukstein, M.D., FACS, Hannibal Chairman, Research Committee, Missouri Chapter, American College of Surgeons

Sponsored by the Missouri Chapter, American College of Surgeons

THORACIC

Friday, April 5

11:00 a.m.	Annual Charles A. Brasher, M.D., Memorial Lecture "Current Problems in Occupational Lung Disease" Speaker: Gerald R. Kerby, M.D. Professor of Medicine, Division of Pulmonary and Critical Care, University of Kansas Medical Center, Kansas City, KS

Sponsored by the Missouri Thoracic Society, American Lung Associations of Eastern and Western Missouri

Affiliated Annual Program Events

(listed alphabetically by sponsoring organization)

CANCER

Saturday, April 6

9:00 a.m.	Scientific Program "Current Issues in Breast Cancer Management"
	"Impact of Early Detection on Survival" Speaker: Marvin Lopez, M.D., FACS, FRCS Assistant Professor, Washington University School of Medicine, St. Louis
	"Surgical Options" Speaker: Marvin Lopez, M.D., St. Louis
	"Breast Conservation Surgery and Irradiation: Patient Selection and Potential Pitfalls" Speaker: John Bedwinek, M.D. Director of Radiation Oncology, St. Joseph Health Center, St. Charles
	"Adjuvant Therapy" Speaker: Morton Levy, M.D., St. Louis
	"Overview and Surgical Consideration" Speaker: Marvin Lopez, M.D., St. Louis

"Induction Chemotherapy"
Speaker: Morton Levy, M.D.,
St. Louis

"Radiotherapy of Advanced Breast Cancer"
Speaker: John Bedwinek, M.D.,
St. Charles

Sponsored by the American Cancer Society

INTERNATIONAL PHYSICIANS

Saturday, April 6

9:30 a.m.	Scientific Program "Organized Approach to Office Dermatology" Speaker: Ronald W. Swinfard, M.D., Chief, Dermatology Section, Harry S. Truman Memorial Veterans Hospital and Assistant Professor of Medicine, University of Missouri-Columbia School of Medicine "Depression and Suicide in Children and Adolescents" Speaker: S. Arshad Husain, M.D. Professor and Chief, Child and Adolescent Psychiatry, University of Missouri-Columbia School of Medicine "Insulin Resistance: A Missing Link Between Hypertension, Obesity and Diabetes" Speaker: Jayendra H. Shah, M.D. Chief, Medical Service, Harry S. Truman Memorial Veterans Hospital; Vice-Chairman, Department of Medicine, University of Missouri-Columbia School of Medicine
11:30 a.m.	American College of International Physicians Luncheon and Business Meeting

Supported by an Educational Grant from Bristol-Myers-Squibb Pharmaceutical Company

Sponsored by the American College of International Physicians

WOMEN PHYSICIANS

Saturday, April 6

10:30- 12:00 noon	Scientific Program "The Dysfunctional Family and Domestic Violence" "Substance Abuse and the Family Pediatrician" Speaker: Katherine W. Smith, M.D. Chief, Section of Adolescent Medicine, Children's Mercy Hospital, Kansas City "The Shaken Baby Syndrome" Speaker: Jane Knapp, M.D. Director of Emergency Services, Children's Mercy Hospital, Kansas City
12:00 noon	American Medical Women's Association Luncheon

Sponsored by the American Medical Women's Association

Annual Meetings and Events

Thursday, April 4

11:30 a.m.	St. Louis Metropolitan Medical Society Luncheon
12:00 noon	Metropolitan Medical Society of Greater Kansas City Luncheon
6:00 p.m.	Reception Honoring MSMA President, Gary A. Dyer, M.D., & MSMA Auxiliary President, Carol Sparkman
7:00 p.m.	MSMA Auxiliary Fundraiser for Missouri State Medical Foundation and AMA-ERF

Friday, April 5

7:00 a.m.	MSMA Councilor District Breakfasts Districts 1,2,4,5,6,8,10

8:30 a.m.	Missouri University Board of Governors Breakfast and Meeting
8:30 a.m.	**MSMA General Session** Special AMA Guest: Palma Formica, M.D., Old Bridge, NJ, AMA Trustee Special Guest Speaker: Ed Kelsay, Oklahoma State Medical Association General Counsel **"Listening: A Loss Prevention Tool"**
12:00 noon	Metropolitan Medical Society of Greater Kansas City Luncheon
12:30 p.m.	*Missouri Medicine* Editorial Board Meeting
12:30 p.m.	Missouri University Medical Alumni Luncheon
12:30 p.m.	Student Delegates Luncheon
2:00 p.m.	St. Louis Metropolitan Medical Society Caucus
6:00 p.m.	Missouri University Medical Alumni Reception

Saturday, April 6

7:15 a.m.	MSMA Auxiliary Public Affairs Breakfast Guest Speaker: TBA
9:30 a.m.	Discuss the Issues with Your AMA Delegates
1:30 p.m.	Missouri Medical Political Action Committee Meeting
6:00 p.m.	**Presidential Inauguration** Dorothy D. Reister, M.D., *Shawnee Mission, Kansas*
6:00 p.m.	St. Louis University Medical Alumni Reception
6:00 p.m.	Washington University Medical Alumni Reception
7:00 p.m.	**MSMA Reception**

House of Delegates

Thursday, April 4

10:00 a.m.	**Opening Session** Presiding, Jo-Ellyn M. Ryall, M.D. St. Louis, Speaker
1:30 p.m.	Reference Committee Meetings

Friday, April 5

4:00 p.m.	**Second Session** Reports of the Reference Committees

Sunday, April 7

7:30 a.m.	**Final Session**, Breakfast Meeting Election of Officers Report of Election of Councilors Reports of Reference Committees Installation of Officers Appointment of Committee & Commission Members

Registration of Delegates opens at 8:00 a.m. in the Century Foyer on Thursday, Friday and Saturday.

Missouri State Medical Association Financial Statement — 1990

John P. Rucker
CERTIFIED PUBLIC ACCOUNTANT

To the Council of the
Missouri State Medical Association:

I have audited the accompanying balance sheets of the Missouri State Medical Association as of December 31, 1990 and 1989, and the related statements of revenues, expenses and changes in members' equity and cash flows for the years then ended. These financial statements are the responsibility of the Association's management. My responsibility is to express an opinion on these financial statements based on my audit.

I did not examine the financial statements of Missouri Medical Insurance Company at December 31, 1989, or 1988. These financial statements were audited by another firm.

These financial statements are not in accordance with generally accepted accounting principals which require investments in the subsidiary and the affiliate to be consolidated with the controlling enity.

I conducted my audit in accordance with generally accepted auditing standards. Those standards require that I plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. I believe that my audit and the report of other auditors provide a reasonable basis for my opinion.

In my opinion, except for the above comments, the financial statements referred to above present fairly, in all material respects, the financial position of Missouri State Medical Association as of December 31, 1990 and 1989, and the results of their operation and its cash flows for the years then ended, in conformity with generally accepted accounting principles.

My audit was made for the purpose of forming an opinion on the basic financial statements taken as a whole. The schedule of selected expenses for the years ended December 31, 1990 and 1989 is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in my opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

John P Rucker

John P. Rucker
Certified Public Accountant

January 26, 1991

MISSOURI STATE MEDICAL ASSOCIATION

BALANCE SHEETS
December 31, 1990 and 1989

ASSETS	1990	1989
CURRENT ASSETS		
Cash and cash investments (Note 2)	$1,430,066	$ 914,834
Marketable securities (Note 3)	566,077	580,516
Accounts receivable	9,416	15,671
Other current assets	231	1,175
Total current assets	2,005,790	1,512,196
INVESTMENTS		
Common stock of MSMI, Inc., a 100% owned unconsolidated subsidiary, at cost plus equity in undistributed net income (Note 4)	21,760	21,484
Common stock of Missouri Medical Insurance Company, a 10.8% owned affiliate, lower of cost or market (Note 5)	120,925	- 0 -
Total investments	142,685	21,484
LAND, BUILDING AND EQUIPMENT (Note 6)	653,861	677,142
OTHER ASSETS, cash surrender value	47,057	39,077
	$2,849,393	$2,249,899

LIABILITIES AND MEMBERS' EQUITY	1990	1989
CURRENT LIABILITIES		
Accounts payable and accrued expenses	$ 22,297	$ 7,908
Due to the American Medical Association	131,137	88,462
Due to County Medical Societies	776	9,393
Deferred revenue	163,506	128,270
Total current liabilities	317,716	234,033
SUBORDINATED NOTES PAYABLE (Note 7)	590,781	590,781
DEFERRED COMPENSATION (Notes 8)	47,693	41,751
Total liabilities	956,190	866,565
MEMBERS' EQUITY	1,893,203	1,383,334
	$2,849,393	$2,249,899

MISSOURI STATE MEDICAL ASSOCIATION

STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN FUND BALANCE
Years Ended December 31, 1990 and 1989

	1990	1989
REVENUES		
Dues	$1,294,998	$1,269,197
Subscriptions	19,541	17,626
Exhibit rentals	24,250	19,600
Advertising	60,038	79,671
Commissions on collections	23,955	23,820
Investment income (Note 9)	142,173	146,329
Administrative fees and office rent (Note 10)	45,308	42,067
Seminars and workshops	25,635	42,696
Physicians Rehab Program (Note 11)	94,771	8,850
Other revenues	22,945	10,346
Total Revenues	1,753,614	1,660,202
EXPENSES		
Salaries & fringe benefits (Note 12)	585,258	560,064
Office expenses	102,879	103,350
Travel expense	4,353	6,792
Commissions & committee expense	722	767
Depreciation	35,812	29,277
MSMA Auxiliary	10,766	8,600
Journal expense	139,512	133,454
Meeting expense	193,859	194,808
Public affairs	30,865	39,418
Telenet system	320	1,159
Consultant & professional fees	52,527	14,564
Public relations program	33,457	24,788
Student awards	1,200	1,200
Tort Reform	28,504	21,139
Miscellaneous	16,610	8,057
Seminars and workshops	16,765	40,115
Physicians Rehab Program (Note 11)	110,561	128,080
Charity Care Program	976	1,934
Countersuit Program	- 0 -	1,117
Total expenses	1,364,946	1,318,683

MISSOURI STATE MEDICAL ASSOCIATION

STATEMENTS OF REVENUES, EXPENSES AND CHANGES
IN FUND BALANCE - (Continued)
Years Ended December 31, 1990 and 1989

	1990	1989
Excess (deficiency) of revenues over expenses before equity in net income of investments	$ 388,668	$ 341,519
Equity in net income (loss) of MSMI, Inc. (Note 4)	276	(290)
Equity in net income (loss) of Missouri Medical Insurance Company (Note 5)	120,925	- 0 -
Excess (deficiency) of revenues over expenses	509,869	341,229
Members' equity, beginning,	1,383,334	1,042,105
Members' equity, ending	$1,893,203	$1,383,334

The Notes to Financial Statements are an integral part of these statements.

MISSOURI STATE MEDICAL ASSOCIATION
STATEMENTS OF CASH FLOWS
Years Ended December 31, 1990 and 1989

	1990	1989
Cash flows from operation activities:		
Net income	$ 509,869	$ 341,229
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation	35,812	29,277
(Increase) or decrease in accounts receivables	6,255	4,864
(Increase) or decrease in other current assets	944	8,960
(Increase) or decrease in cash surrender value	(7,980)	(7,455)
Increase or (decrease) in accounts payable	14,388	156
Increase or (decrease) in due to the AMA	42,675	(114,018)
Increase or (decrease) in due to the county societies	(8,617)	(2,999)
Increase or (decrease) in deferred revenue	35,236	(102,855)
Increase or (decrease) in deferred compensation	5,942	5,742
Total adjustments	124,655	(178,328)
Net cash provided by operations	634,524	162,901
Cash flows from investing activities:		
Increase or (decrease) in marketable securities	14,439	(99,407)
(Increase) or decrease in MSMI, Inc. investment	(276)	290
Decrease in note receivable affiliate	- 0 -	100,000
Increase in affiliate	(120,925)	- 0 -
Purchase of equipment	(12,530)	(93,681)
Remodeling	- 0 -	(246,544)
Net cash used investing	(119,292)	(339,342)
Net increase or (decrease) in cash	515,232	(176,441)
Cash at beginning of year	914,834	1,091,275
Cash at end of year	$1,430,066	$ 914,834

The Notes to Financial Statements are an integral part of these statements.

MISSOURI STATE MEDICAL ASSOCIATION

NOTES TO FINANCIAL STATEMENTS

Note 1. Significant Accounting Policies

Financial Statements:

The financial statements of the Missouri State Medical Association are prepared on the accrual basis of accounting.

Dues:

Dues are assessed to members on a calendar year basis. On December 31 of each year, members delinquent in payment of dues forfeit their memberships. The Association may also collect from members, dues and assessments of the American Medical Association and County Medical Societies, which are then forwarded to the respective organizations by the Association. The Association receives a fee for providing this service. Amounts received from members prior to January 1 of each year, which represents the subsequent year's dues, are recorded as deferred revenue.

Valuation of accounts receivable:

Accounts receivable are stated at face amount with no allowance for doubtful accounts. An allowance for doubtful accounts is not considered necessary because probable uncollectible accounts are immaterial.

Marketable Securities:

Investments in marketable equity securities are carried at the lower of aggregate cost or market at the balance sheet date.

Property and equipment:

Property and equipment are carried at cost. Depreciation is computed by the straight-line method based on estimated useful lives of the related assets.

Income Taxes:

The Association is exempt from federal income taxes under the Internal Revenue Code Section 501(c)(6). Any unrelated business income is subject to income tax.

Reclassifications:

Certain reclassifications have been made to conform to the 1989 presentation.

MISSOURI STATE MEDICAL ASSOCIATION

NOTES TO FINANCIAL STATEMENTS

Note 2. Cash and cash investments

The balance of cash and cash investments consisted of the following at December 31:

	1990	1989
Petty cash	$ 50	$ 50
Cash in bank, Executive Secretary Account	4,308	3,327
Cash in bank, Treasury Account	68,320	12,914
Cash in bank, Physicians Rehab Program	1,714	87
Money Market Fund	164,674	107,456
Certificates of deposit	1,191,000	791,000
	$1,430,066	$ 914,834

Note 3. Marketable Securities

Investments in marketable equity securities are carried at the lower of aggregate cost or market at the balance sheet date.

The following is a summary of marketable equity securities at December 31:

	1990	1989
Aggregate cost	$566,077	$580,516
Aggregate market	594,506	665,715
Unrealized gain (loss)	$ 28,429	$ 85,199

Net realized gain of $8,969 and $17,275 on the sale of marketable equity securities were included in revenue for the years ended December 31, 1990 and 1989, respectively.

Note 4. Investments in Unconsolidated Subsidiary

The Association's investment in MSMI, Inc., a 100% owned unconsolidated subsidiary, is carried at cost ($2,000) plus equity in the undistributed net earnings since the date of acquisition. At December 31, 1990 and 1989, the investment in the subsidiary is carried at $23,360 and $21,484 respectively.

Condensed financial data relating to the subsidiary follows:

Note 4. Investment in Unconsolidated Subsidiary (Continued)

MSMI, INCORPORATED
BALANCE SHEETS

ASSETS	-- December 31 -- 1990	1989
CURRENT ASSETS		
Cash, including savings account	$ 8,360	$ 6,484
Total current assets	8,360	6,484
INVESTMENTS - COMMON STOCK	15,000	15,000
	$ 23,360	$ 21,484
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES		
Accounts Payable	$ 1,600	$ - 0 -
STOCKHOLDERS' EQUITY		
Common stock, $10 par value: 3000 shares authorized; 200 shares issued and outstanding	2,000	2,000
Retained earnings	19,760	19,484
Total stockholders' equity	21,760	21,484
	$ 23,360	$ 21,484

STATEMENT OF INCOME AND EXPENCES

	For the year ended -- December 31 -- 1990	1989
Income	6,008	4,821
Expenses	5,732	5,111
Net income (loss)	$ 276	$ (290)

Note 5. Investment in Affiliate

The Association exercises significant management control over its affiliate, Missouri Medical Insurance Company (MOMEDICO), by virtue of its ownership of 61.3% of the voting rights of the Company. At December 31, 1990 and 1989, the Association owned 10.8% of the outstanding common stock of its affiliate. The Association's investment in MOMEDICO is carried at the lower of cost or market value.

Note 5. Investment in Affiliate (continued)

Condensed financial data relating to the subsidiary follows:

Consolidated balance sheets	-- December 31 -- 1989	1988
Investments	$41,317,027	$35,271,302
Other assets	2,239,538	2,095,560
Total assets	$43,556,565	$37,366,862
Reserve for losses & loss adjustment expense	$32,217,508	$28,185,938
Other liabilities	8,864,661	9,581,800
Total liabilities	41,082,169	37,767,738
Stockholders' equity	2,474,396	(400,876)
Total liabilities and stockholders' equity	$43,556,565	$37,366,862

Consolidated statement of operations	For year ending -- December 31 -- 1989	1988
Revenues	$17,079,328	$16,261,293
Expenses	12,722,213	14,109,857
	4,357,115	2,151,436
Provision for Federal income tax	1,481,843	731,743
Earnings (loss) before extraordinary item	2,875,272	1,419,693
Extraordinary item - use of loss carry forward	- 0 -	731,743
Net earnings	$ 2,875,272	$ 2,151,436

Note 6. Land, Buildings and Equipment

Consists of the following at December 31:

	1990	1989
Land	$ 83,000	$ 83,000
Buildings	581,704	581,704
Furniture and equipment	293,432	280,901
	958,136	945,605
Less accumulated depreciation	304,275	268,463
	$653,861	$677,142

Note 7. Subordinated Notes Payable

In 1978, the Association formed a wholly owned subsidiary, MOMEDICO to provide professional liability and premises liability insurance for physicians and support technicians practicing in the State of Missouri. Before obtaining professional liability insurance through MOMEDICO, physicians residing in the State of Missouri were required to subscribe to non-interest bearing subordinated notes based upon the physician's underwriting classification. These notes were issued by the Association and the subscriptions were payable over a three year period.

The Association was the sole stockholder of MOMEDICO prior to public stock offering of MOMEDICO in 1980. At that time, the requirement to purchase subordinated notes was eliminated with new policies effective after January 31, 1980.

In connection with the public stock offering in 1980 MOMEDICO assumed, in exchange for 100,815 of the 125,000 shares of the Class B common stock the Association held in MOMEDICO, the face value of the subordinated notes issued and outstanding. MOMEDICO also assumed the balance of the installments receivable on the subordinated notes and a bank note payable from the Association. Under an exchange offer made by MOMEDICO, holders of the Association's subordinated note could exchange fully paid notes for Class A common stock at the rate of $20 face value per share.

On October 15, 1980, the Association reassumed all notes not exchanged and also the installments receivable on the unexchanged notes as well as an amount equal to the installments receivable of the bank note payable.

MISSOURI STATE MEDICAL ASSOCIATION

NOTES TO FINANCIAL STATEMENTS

Note 7. Subordinated Notes Payable (continued)

The notes require repayment, only upon the Association's accumulation of in excess of $3,000,000 of members' equity at the end of any calendar year, that the Association has sufficient funds and assets, exclusive of the amount subject to repayment, to permit it to carry on business, and that the repayment be approved by the Council of the Association. Interest may be paid on the notes, but it is at the discretion of the Council of the Association.

Redemption of the notes are provided for in the event of death, disability, retirement of the holder, or if the holder has moved both his person and his practice out of the State of Missouri. However, redemption for such causes may be delayed or refused if the Council determines the Association is not on a financially reasonable basis to make such redemptions.

At December 31, 1990 and 1989, the balance of the subordinated notes payable was $590,781. This amount reflects the face value of the notes reassumed by the Association on October 15, 1980, less the installments receivable on the outstanding notes, and less all redemptions made from 1981 through 1985. In 1985, the Council of the Association placed a moratorium on the redemption of the subordinated notes.

Note 8. Deferred Compensation Plan

The Association has a deferred compensation plan agreement with its Executive Vice-President providing for payments upon retirement, death or disability. The plan agreement also stipulates that a pro-rata settlement of benefits will be made in the event of voluntary termination of employment with the Association.

At December 31, 1990 and 1989, the Association's liability under the terms of the plan were $47,693 and $41,751, respectively.

Note 9. Investment Income

The following is a summary of investment income for the years ended December 31:

Note 9. Investment Income (continued)

	1990	1989
Interest on cash investments	$ 99,394	$ 91,203
Interest on notes receivable	- 0 -	5,467
Dividends	33,810	32,384
Realized gain or (loss) on the sale of marketable equity securities	8,969	17,275
Total	$142,173	$146,329

Note 10. Related Party Transactions

The Association provides administrative services to MSMI, Inc. (a wholly owned subsidiary) and Missouri State Medical Foundation (an affiliate). For providing these services, the Association receives an annual fee from each of the two organizations. For the years ended December 31, 1990 and 1989, the administrative fee assessed Missouri State Medical Foundation was $12,000 and $12,000 and the administrative fee assessed MSMI, Inc. was $4,100 and $3,500, respectively.

The Association during 1990 and 1989, also provided office space, office furniture and office services for its affiliate, MOMEDICO. In exchange for providing these services, the Association assesses a monthly fee. For the years ended December 31, 1990 and 1989 these were $15,900 and $15,900.

Note 11. Physicians Rehabilitation Program

During 1986, the Association established a Physicians Rehabilitation Program (PRP), the purpose of which is to motivate impaired physicians to voluntarily enter treatment and to provide such a treatment program.

Funding for the program is to be provided by fees assessed to participants as well as from donations received from supportive individuals and organizations.

The following is a summary of the program's revenue and expenses for the year ended December 31, 1990 and 1989.

	1990	1989
Revenue:		
Hospital Staff	$48,180	$ - 0 -
Insurance Company	30,000	- 0 -

MISSOURI STATE MEDICAL ASSOCIATION

NOTES TO FINANCIAL STATEMENTS

Note 11. Physicians Rehabilitation Program (continued)

	1990	1989
Participant fees	15,171	2,250
Donations	1,420	6,600
Total revenues	$94,771	$ 8,850
Expenses:		
Medical director - contracted salary	$ 50,000	$ 50,000
Salary - coordinator and administrative assistant	34,194	34,729
Office expense	3,471	12,076
Secretarial services	2,786	- 0 -
Publications	769	680
Travel	9,411	15,831
Legal and consulting fees	597	- 0 -
PHC committee	- 0 -	292
Bad Debts	- 0 -	5,125
Facility expense	5,174	7,628
Lab fees	105	1,025
Counselor services	4,054	694
Total expenses	$110,561	$128,080

Note 12. Pension Plan

The Association has a non-contributory defined benefit pension plan covering substantially all of its employees. As of March 31, 1990, the Plan was fully funded with no unfunded accrued liability. A comparison of the actuarial present value of accumulated plan benefits and net assets available for benefits for the plan year ended March 31, is as follows:

Note 12. Pension Plan (continued)

Current liabilities

	1990	1989
Vested	$442,355	$380,215
Nonvested	1,213	1,245
Total	$443,568	$381,460
Net assets available for benefits	$612,676	$575,783

The average assumed rate of return used in determining the actuarial present value of accumulated plan benefits was 8% for both 1990 and 1989.

Other information required by FASB 87 was not available.

The total pension contributions for years ended December 31, 1990 and 1989 were $25,711 and $21,682, respectively.

MISSOURI STATE MEDICAL ASSOCIATION

SCHEDULE OF SELECTED EXPENSES
December 31, 1990 and 1989

	1990	1989
SALARIES AND FRINGE BENEFITS		
Salaries	$457,614	$461,818
Payroll taxes	37,860	32,758
Employees life & disability insurance	12,483	5,401
Employees hospitalization insurance	40,891	30,670
Employees pension plan contribution	30,447	26,130
Deferred compensation plan expense	5,963	3,287
Total salaries and fringe benefits	$585,258	$560,064
OFFICE EXPENSES		
Occupancy expense	$ 16,009	$ 16,743
Office supplies	14,133	14,803
Computer expense	13,371	11,808
Postage	17,564	22,974
Telephone	12,608	13,856
Insurance	5,982	7,261
Taxes, real estate	3,572	3,255
Custodian fees	3,777	4,011
Equipment rental and repair	8,466	4,790
Dues and directories	7,397	3,849
Total office expenses	$102,879	$103,350
COMMISSIONS AND COMMITTEES EXPENSES		
Commissions:		
Commission on Medical Economics, Third Party Medicine and Governmental Relations	$ 73	$ - 0 -
Commission on Continuing Medical Education	- 0 -	386
Commission on Interspeciality Medicine	250	206
Commission on Medical - Legal Affairs	- 0 -	111
Total commissions expenses	323	703

MISSOURI STATE MEDICAL ASSOCIATION

SCHEDULE OF SELECTED EXPENSES (Continued)
December 31, 1990 and 1989

	1990	1989
COMMISSIONS AND COMMITTEES EXPENSES (Continued)		
Committees:		
Committee on Planning	55	- 0 -
Committee on Legislative Affairs	344	64
Total committee expenses	399	64
Total commissions & committee expenses	$ 722	$ 64
MEETING EXPENSES		
Meetings:		
Annual session	$ 61,457	$ 71,865
Council	49,780	47,599
AMA delegates' expenses	68,859	69,421
Resident Physicians Section	2,528	872
Young Physicians Section	2,482	2,223
Student Section	4,600	(861)
Discretionary Council Fund	1,484	2,027
Hospital medical staff	2,669	1,662
Total meeting expenses	$193,859	$194,808

Missouri State Medical Foundation Financial Statement — 1990

John P. Rucker
CERTIFIED PUBLIC ACCOUNTANT

To the Board of Directors of
Missouri State Medical Foundation

I have audited the accompanying statements of assets and fund balance on a modified cash basis of Missouri State Medical Foundation as of December 31, 1990 and 1989, and the related statements of revenues, expenses and changes in fund balance on a modified cash basis for the years then ended. These financial statements are the responsibility of the Foundation's management. My responsibility is to express an opinion on these financial statements based on my audit.

I conducted my audit in accordance with generally accepted auditing standards. Those standards require that I plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. I believe that my audits provide a reasonable basis for my opinion.

As described in Note 1 of the notes to financial statements, the accompanying statements are prepared on the modified cash basis of accounting and, accordingly, are not intended to be presented in conformity with generally accepted accounting principles.

In my opinion, the financial statements mentioned above present fairly the assets and fund balance of the Missouri State Medical Foundation as of December 31, 1990 and 1989, and its revenues, expenses, and changes in fund balances for the years then ended, in conformity with the Foundation's modified cash basis of accounting policy, as described in Note 1 of the notes to financial statements.

John P. Rucker

John P. Rucker
Certified Public Accountant

January 31, 1991

The Notes to Financial Statements are an integral part of these statements.

MISSOURI STATE MEDICAL FOUNDATION

STATEMENTS OF ASSETS AND FUND BALANCE
(Modified Cash Basis)
December 31, 1990 and 1989

ASSETS

	1990	1989
Cash	$ 680,984	$ 816,267
Marketable securities (Note 3)	358,527	- 0 -
Loans receivable, less allowance for doubtful accounts of $36,185 and $38,489 (Note 4)	1,169,969	1,244,566
Equipment, less accumulated depreciation of $6,379 and $5,103	- 0 -	1,275
	$ 2,209,480	$ 2,062,108

LIABILITIES AND FUND BALANCE

	1990	1989
	$ - 0 -	$ - 0 -
Fund Balance	2,209,480	2,062,108
	$ 2,209,480	$ 2,062,108

MISSOURI STATE MEDICAL FOUNDATION

STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN FUND BALANCE
(Modified Cash Basis)
Years Ended December 31, 1990 and 1989

	1990	1989
REVENUES		
Interest on student loans	$ 105,860	$ 88,678
Other interest and dividends	59,921	54,314
Contributions etc.	8,461	5,766
Total Revenues	174,242	148,758
EXPENSES		
Administrative (Note 5)	12,000	12,000
Professional	3,412	883
Printing and meeting expense	3,045	1,317
Provision for loan losses (Note 4)	5,012	2,401
Miscellaneous	2,125	654
Depreciation	1,276	1,276
Total expenses	26,870	18,531
Excess revenues over expenses	147,372	130,227
Fund balance, beginning	2,062,108	1,931,881
Fund balance, ending	$ 2,209,480	$ 2,062,108

MISSOURI STATE MEDICAL FOUNDATION

NOTES TO FINANCIAL STATEMENTS

Note 1. Significant Accounting Policies

Method of accounting:

The accounts are maintained and these statements are presented, on a modified cash basis under which, except for the recognition of the assets and liabilities shown on the statement of assets, liabilities and fund balance on a modified cash basis, only cash receipts and disbursements are recorded and reflected in these statements. Since accrued interest on loans receivable and receivables which may be material in amount, are not reflected, the financial statements are not intended to present the overall financial position and results of operations in conformity with generally accepted accounting principles. However, the individual assets shown are presented in accordance with generally accepted accounting principles.

Loans receivable:

Loans receivable are stated at face amount with an allowance for doubtful accounts computed as 3 percent of the balance of the loans receivable at year end.

Tax status:

The Foundation is a not-for-profit organization exempt from federal income taxes under Internal Revenue Code Section 501(c)(3).

Equipment:

Equipment is carried at cost. Depreciation is computed by the straight-line method based on the estimated useful life of the asset.

Note 2. Cash and cash investments

	1990	1989
Cash in bank	$ (10,918)	$ 14,655
Money market fund - Prudential	145,342	- 0 -
Money market fund - bank	146,560	801,612
Certificates of deposit	400,000	- 0 -
	$ 680,984	$ 816,267

Note 3. Marketable securities

Investments in marketable equity securities are carried at the lower of aggregate cost or market at the balance sheet date.

To increase or decrease the carrying amount of the marketable equity securities portfolio to aggregate cost or market at December 31, 1990 and 1989, a valuation allowance was established with a corresponding charge or (credit) to income.

The following is a summary of marketable equity securities at December 31:

Missouri State Medical Foundation Financial Statement — 1990 *(continued)*

	1990	1989
Aggregate cost	$ 358,527	$ - 0 -
Aggregate market	362,891	- 0 -
Unrealized gain (loss)	$ 4,364	$ - 0 -

Net realized gain of $ - 0 - and $ - 0 - on the sale of marketable equity securities were included in revenue for the years ended December 31, 1990 and 1989, respectively.

Note 4. Loans Receivable

The Foundation grants low interest loans in multiples of $1,000 per year for medical students. The following is a summary of the transactions affecting the loans receivable account for the years ended December 31, 1990 and 1989:

		1990		1989
Loans receivable at January 1		$1,283,055		$1,289,424
Add loans advanced	$163,000		$193,000	
Less:				
Loans not completed in 1989	(24,000)			
Principal repayments	(208,586)		(196,774)	
Loans written off	(7,316)	(76,902)	(2,595)	(6,369)
		1,206,153		1,283,055
Allowance for doubtful accounts at January 1	(38,489)		(38,683)	
Current year provision for doubtful accounts	(5,012)		(2,401)	
Current year loans written off	7,316	(36,185)	2,595	(38,489)
		$1,169,968		$1,244,566

Note 5. Related Party Transactions

The Foundation is assessed by the Missouri State Medical Association an annual fee for administrative cost. For each year ended December 31, 1990 and 1989, the Foundation paid the Association $12,000 and $12,000 for administrative costs. The Foundation also reimburses the Missouri State Medical Association for expenses paid by the Association on behalf of the Foundation. These reimbursements for the years ended December 31, 1990 and 1989 were $ - 0 - and $883 for professional fees and $2,728 and $1,317 for printing and meeting expenses.

Continuing Medical Education

The continuing medical education accreditation program of the MSMA has full approval by the AMA's Council on Medical Education. The institutions and functions listed here qualify for Category I credit for the AMA Physician's Recognition Award. All accredited institutions in Missouri are invited to send this information for listing in MISSOURI MEDICINE. Please remember to include the name of the individual who can be contacted at your institution for additional information about your CME events.

March

1 - 3 **Group Relations Conference** — Location: University of Missouri, Columbia, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

4 - May 20 **17th Annual Internal Medicine Review (Monday Evenings)** — Location: Steinberg Amphitheater, The Jewish Hospital, St. Louis, MO. Contact: Cathy Caruso, CME Office, Washington University School of Medicine, 660 S. Euclid Ave., St. Louis, MO 63110. 314/362-6893 or 1-800-325-9862.

8 **Preceptor's Day** — Location: University of Missouri, Columbia, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

8 - 9 **4th Annual Contact Lens Course** — Location: Washington University Medical Center, St. Louis, MO. Contact: Cathy Caruso, Washington University School of Medicine, CME Office, 660 S. Euclid, Box 8063, St. Louis, MO 63110. 1-800-325-9862 or 314/362-6893.

8 - 9 **Advanced Trauma Life Support Provider Course** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

9 - 10 **Family Practice Update** — Location: University of Missouri, Columbia, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

11 **City-Wide Radiology Conference: Fundamental Observations in Chest Radiology** — Location: Mallinckrodt Institute of Radiology, St. Louis, MO. Contact: R. Gilbert Jost, M.D., Chief of Diagnostic Radiology, Mallinckrodt Institute of Radiology, 510 S. Kingshighway, St. Louis, MO 63110. 314/362-7130.

12 **Pediatric Advanced Life Support Recertificatin Course (PALS)** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104-1083. 1-800-553-2712.

14 **Serotonin (5-HT) 1991: Its Role in the Treatment of Anxiety, Sleep Disorders, Schizophrenia & Depression** — Wohl Auditorium, Washington University Medical Center, St. Louis, MO. Contact: CME Office, Washington University School of Medicine, 660 S. Euclid, Box 8063, St. Louis, MO 63110. 1-800-325-9862 (intersate) and 314/362-6893 (in Missouri).

15 **Clinical Conferences in Otolaryngology/Head & Neck Surgery: Endoscopic Sinus Surgery** — Location: St. Joseph's Hospital, St. Charles, MO. Contact: St. Louis University CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712 or 314/577-8167.

16 **Cardiovascular Conference** — Location: Ritz Carlton, St. Louis, MO. Contact: St. Louis University Medical Center, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104-1083. 1-800-553-2712.

22 **Ninth Annual Symposium on Geriatric Medicine** — Location: Breckinridge Frontenac Inn, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

April

4 **In Vivo Magnetic Resonance Spectroscopy IV** — Location: The Ritz-Carlton, St. Louis, MO. Contact: Radiology Postgraduate Education, Room C-324, University of California School of Medicine, San Francisco, CA 94143. 415/476-5731.

4 - 5 **Critical Care Update** — Location: Holiday Inn Executive Center, Columbia, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

6 **Hypercholesterolemia: Practical Aspects to Patient Management** — Location: Hyatt Regency, Union Station, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

8 **Leroy Sante Lecture** — Location: St. Louis University, St. Louis, MO. Contact: R. Gilbert Jost, M.D., Chief of Diagnostic Radiology, Mallinckrodt Institute of Radiology, 510 S. Kingshighway, St. Louis, MO 63110. 314/362-7130.

10 - 13 **Treatment of Surgical Spine Disease** — Location: The Ritz-Carlton Hotel, St. Louis, MO. Contact: Cathy Caruso, CME Office, Washington University School of Medicine, 660 S. Euclid, Box 8063, St. Louis, MO 63110. 1-800-325-9862 or 314/362-6893.

11 - 12 **23rd Annual Matt Weiss OB/GYN Symposium** — Location: Breckinridge Frontenac Hotel, St. Louis, MO. Contact: Judith O'Guin, St. John's Mercy Medical Center, 615 S. New Ballas Road, St. Louis, MO 63141. 314/569-6290.

12 - 13 **The 6th Dr. Robert K. Match Distinguished Scholar Program: Controversies In the Management of Breast Cancer** — Location: The Waldorf-Astoria, New York, N.Y. Contact: Ann J. Boehme, CMP, Associate Director of Continuing Education, Long Island Jewish Medical Center, New Hyde Park, NY 11042. 718/470-8650, or FAX: 516/352-4801.

12 - 14 **Annual Geriatric Psychiatry Conference: Recognition and Treatment of Problem Behaviors in Long Term Care** — Location: Tan-Tar-A Resort, Osage Beach, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63014. 1-800-553-2712.

13 **Electro Compulsive Therapy** — Location: Hyatt Regency-Union Station, St. Louis, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

14 - 15 **Advanced Cardiac Life Support Provider Course** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University Medical Center, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104-1083. 1-800-533-2712.

17 - 19 **Seventh Non-invasive Diagnosis of Vascular Disease Symposium** — Location: Henry VIII Hotel and Conference Center, St. Louis, MO. Contact: Judith O'Guin, St. John's Mercy Medical Center, 615 S. New Ballas Road, St. Louis, MO 63141.

18 - 21 **Advanced Microsurgery of the Lumbar & Cervical Spine** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

22 - May 3 **Institute For Clinical Health Care Ethics** — Location: St. Louis University, Margaret McCormick Doisy Learning Resources Center, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-533-2712.

25 - 26 **18th Annual Obstetrics and Gynecology Symposium** — Location: Washington University Medical Center, St. Louis, MO. Contact: Cathy Caruso, CME Office, Washington University School of Medicine, 660 S. Euclid, Box 8063, St. Louis, MO 63110.

27 **Update in Gastroenterology & Hepatology For Primary Care Physicians** — Location: Hyatt Regioncy at Union Station, St. Louis, MO. Contact: St. Louis University School of Medicine, Continuing Medical Education, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

30 - May 2 **Molecular Basis of Bone Cell Physiology: Transcellular Signaling** — Location: The Sheraton West Port Inn, St. Louis, MO. Contact: Cathy Caruso, CME Office, Washington University School of Medicine, 660 S. Euclid, Box 8063, St. Louis, MO 63110. 1-800-325-9862 or 314/362-6893.

May

1 **Updates in Diabetes** — Location: St. John's Mercy Medical Center, von Gontard Conference Center, St. Louis, MO. Contact: Judith L. O'Guin, St. John's Mercy Medical Center, 615 S. New Ballas Rd., St. Louis, MO 63141. 314/569-6930.

1 - 3 **Protection for Research Risk** — Location: The Hyatt Regency, Union Station, St. Louis, MO. Contact: Cathy Caruso, CME Office, Washington University School of Medicine, 660 S. Euclid, Box 8063, St. Louis, MO 63110. 1-800-325-9862 or 314/362-6893.

2 - 3 **Current Management in Critical Care** — Location: Allis Plaza Hotel, Kansas City, MO. Contact: Linda F. Smutz, Kansas City Southwest Clinical, 7920 Ward Parkway, Suite 205, Kansas City, MO 64114. 816/523-3383.

3 - 5 **OR Legal Environment: Medicine Response** — Location: Don CeSar Beach Resort, St. Petersburg, FL. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-533-2712.

May

8 - 9 **Focus on Acute Pediatric Conditions** — Location: St. John's Mercy Medical Center, von Gontard Conference Center, St. Louis, MO. Contact: Judith L. O'Guin, St. John's Mercy Medical Center, 615 S. New Ballas Rd., St. Louis, MO 63141. 314/569-6290.

8 - 10 **Pediatric Advanced Cardiac & Trauma Support for Life and Pediatric Advanced Life Support Course (PACTS/PALS)** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University Medical Center, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63140-1083. 1-800-533-2712.

10 - 11 **31st Annual Washington University Spring Meeting and Eye Alumni Association Meeting** — Location: Washington University, St. Louis, MO. Contact: Kathy Ryan, Washington University School of Medicine, 660 S. Euclid, St. Louis, MO 63110. 314/362-5722.

10 - 12 **Allergy For the Clinician** — Location: Ritz Carlton Hotel, St. Louis, MO. Contact: St. Louis School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-533-2712.

13 **City-Wide Radiology Conference** — Location: Mallinckrodt Institute of Radiology, St. Louis, MO. Contact: R. Gilbert Jost, M.D., Chief of Diagnostic Radiology, Mallinckrodt Institute of Radiology, 510 S. Kingshighway, St. Louis, MO 63110. 314/362-7130.

13 - 18 **Health Care Ethics in a Pluralistic Society** — Location: St. Louis University, Margaret McCormick Doisy Learning Resource Center, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand, St. Louis, MO 63104. 1-800-533-2712.

16 - 18 **Vascular Surgery 1991** — Location: The New York Marriott Marquis, New York, NY. Contact: Ann J. Boehme, CMP, Associate Director for Continuing Education, Long Island Jewish Medical Center, New Hyde Park, New York, NY 11042. 718/470-8650.

17 - 18 **Low Back & Sciatic Pain: Evaluation and Treatment** — Location: Washington University Medical Center, St. Louis, MO. Contact: Cathy Caruso, Washington University School of Medicine, CME Office, 660 S. Euclid, Box 8063, St. Louis, MO 63110. 1-800-325-9862 or 314/362-6893.

17 - 19 **Surgical Stabilization of Spinal Fractures: Hands-On State-Of-The-Art Workshop** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand, St. Louis, MO 63104. 1-800-533-2712 or 314/577-8167.

17 - 19 **Internal Medicine Review** —Location: University of Missouri, Columbia, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

31 - June 2 **A.K. Rice National Scientific Program** — Location: Ritz-Carlton Hotel, St. Louis, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

June

3 - 5 **Microsurgery of the Peripheral Nerve** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University School of Medicine, Continuing Medical Education, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

6 - 7 **Patent Development** — Location: Eldorado Hotel, Santa Fe, NM. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

6 - 8 **Microsurgery of the Spine: Stabilization** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University School of Medicine, Continuing Medical Education, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

7 **Perinatal Sonography: Clinical Applications** — Location: Adam's Mark Hotel, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand, St. Louis, MO 63104. 1-800-533-2712.

7 - 8 **Primary Pediatrics** — Location: University of Missouri, Columbia, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

10 - 15 **Microsurgery of the Brain** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University School of Medicine, Continuing Medical Education, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

20 - 23 **Missouri Academy of Family Physicians 43rd Annual Scientific Assembly** — Location: Marriott's Tan-Tar-A Resort, Osage Beach, MO. Contact: M.A.F.P., 222 W. Gregory Blvd., Suite G-1, Kansas City, MO 64114.

22 - 26 **Back to the Basics in the Tetons** — Location: Jackson Lake Lodge, Jackson, WY. Contact: Julie Potts/Anne Williamson, Missouri Postgraduate Course in Allergy, Inc., Suite A, 24-26 South Main Street, Liberty, MO 64068. 816/781-0902.

28 - 30 **Frontiers in Endosurgery (Urologists only)** — Location: Washington University Medical Center, St. Louis, MO. Contact: Cathy Caruso, CME Office, Washington University School of Medicine, 660 S. Euclid, Box 8063, St. Louis, MO 63110. 1-800-325-9862 or 314/362-6893.

29 - 30 **Advanced Cardiac Life Support Provider Course** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University Medical Center, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104-1083. 1-800-533-2712.

July

20 - 27 **9th Annual Medical Seminar, Topics in Contemporary Medicine** — Location: Plummer's Great Slave Lake Lodge, Northwest Territories, Canada. Contact: Joseph F. Bocklage, M.D., 103 Oakdale Medical Center, 3366 Oakdale Avenue North, Minneapolis, MN 55422. 612/588-9478.

26 **ACLS Recertification Course** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand, St. Louis, MO 63104. 1-800-533-2712.

August

10 - 16 **Tenth Annual Scientific Meeting and Exhibition of the Society of Magnetic Resonance in Medicine** — Location: San Francisco, CA. Contact: SMRM, 1918 University Avenue, Suite 3C, Berkely, CA 94704. 415/841-1899. FAX: 415/841-2340.

September

18 - 20 **Pediatric Advanced Cardiac & Trauma Support For Life and Pediatric Advanced Life Support Course (PALS/PACTS)** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University Medical Center, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104-1083. 1-800-533-2712.

27 - 28 **Advanced Trauma Life Support Provider Course** — Location: St. Louis University, Margaret McCormick Doisy Learning Resources Center, St. Louis,MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand, St. Louis, MO 63104. 1-800-533-2712.

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Missouri Medicine prides itself on its beautiful covers. The journal repeatedly receives compliments on its featured art. You can help to ensure that the tradition of creative covers for *Missouri Medicine* continues. We would love to see your photos/paintings of Missouri, animals, birds, flowers, landscapes — anything with a taste of Missouri. If you have a photograph/painting you would like to see on our cover, we want to see it! Send a 35 mm slide of your work to: **MISSOURI MEDICINE**, 113 Madison, P.O. Box 1028, Jefferson City, MO 65102. Don't be shy! For questions call **Valerie A. Peters**, Managing Editor at 314/636-5151.

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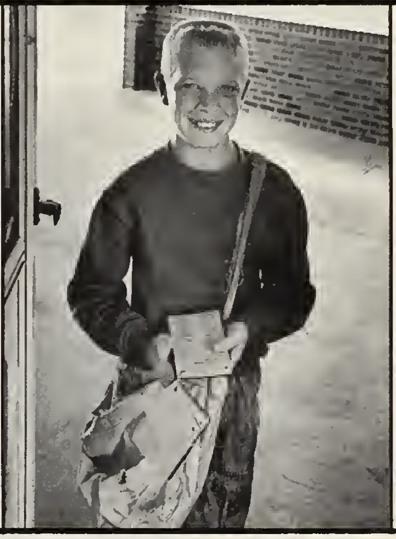

Physician's Recognition Awards

Thirty-three MSMA members qualified for the MSMA-AMA Physician's Recognition Award during December 1990. The award, presented by the Missouri State Medical Association and the American Medical Association, is given to those physicians who voluntarily complete 150 credit hours of continuing medical education within a three-year period. Sixty of the credit hours must be earned in Category 1 programs.

Boone

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Buchanan

William H. Gondring, *St. Joseph*
Robert J. LacKamp, *St. Joseph*

Butler-Wayne-Ripley-Carter

Ann Lutzeier-Peick, *Poplar Bluff*

Cape Girardeau

Charles E. DeFelice, *Cape Girardeau*
Karen Yates, *Cape Girardeau*
Anthony C. Zoffuto, *Cape Girardeau*

Clay-Platte

Donald E. Kuenzi, *Kansas City*

Cole

Thomas J. Hancock, D.O., *Jefferson City*

Greene

Carol T. Berner, *Springfield*
Jimmy C. Presley, *Springfield*

Jasper

John E. Goff, *Joplin*

Metro Med of Greater Kansas City

Raymond A. Amoury, *Kansas City*
George S. Devins, *Kansas City*
Michele R. Flicker, *Kansas City*
Bruce Graham, *Kansas City*
Frederick W. Hahn, *Independence*
Roberto Lopez-Plata, *Kansas City*
Milagros E.L. Tiojanco, *Kansas City*
James W. Willoughby, *Liberty*
Morris F. Wise, *Kansas City*

South Central

Druery J. Dixon, *Willow Springs*

St. Louis Metro

Thomas J. Banton, *Florissant*
Edward G. Dewein, *St. Louis*
Harry C. Eggleston, *St. Louis*
Thomas B. Ferguson, *St. Louis*
William P. Hamilton, *St. Louis*
Godofredo M. Herzog, *Florissant*
Bruce L. McClennan, *St. Louis*
William B. Mill, *St. Louis*
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Medical School News

University of Missouri-Columbia

■ A drug developed by MU researchers recently received recognition from Great Britain's minister of state for health.

Richard Holmes, M.D.

Ceretec, a radiopharmaceutical used to measure blood flow in the brain, was awarded a special commendation by the jury that chooses the winner of the Prix Galien, the most prestigious award for pharmaceutical innovation in Great Britain. The drug is produced and marketed by Amersham International, a British firm that purchased Ceretec's licensing rights from MU in 1983.

According to **Richard A. Holmes, M.D.**, professor of radiology at MU's School of Medicine, "Ceretec has made Amersham a major pharmaceutical player around the world." Holmes is chief of nuclear medicine at both MU and Harry S. Truman Memorial Veterans Hospital. Along with Holmes, Ceretec was developed by **David Troutner, Ph.D.**, and **R. Kent Murmann, Ph.D.**, both of whom are now professors emeriti of chemistry, and **Wynn Volkert, Ph.D.**, professor and chief of radiological research in the department of radiology. Volkert is an associate career research scientist at Truman Veterans Hospital.

■ The family of the late **Howard A. Rusk, M.D.**, a 1923 graduate of the School of Medicine's then two-year program, recently donated his archives to the School. Rusk, a native of Brookfield, Mo., is considered the originator of rehabilitation medicine for the physically disabled. While an officer in the U.S. Air Force during World War II, he pioneered rehabilitative techniques with wounded servicemen, and his work with civilians won him national acclaim after the war. In 1974, MU's Rusk Rehabilitation Center was named in his honor. The donated archives include professional and personal correspondence, photos, plaques, diplomas and his medical library. Rusk also willed money to the School of Medicine to establish the *Howard A. Rusk Memorial Scholarship Fund* for medical student scholarships and loans.

■ A recent issue of *Clinical Orthopaedics* was dedicated to **J. Vernon Luck, M.D.**, a pioneering orthopaedic surgeon who graduated from MU's two-year medicine progam in 1929. The journal published his 1962 presidential address to the American Academy of Orthopaedics, and it was noted that many of the Hannibal native's predictions, made almost 30 years ago, have come to pass. Luck, one of the country's finest orthopaedic surgeons specializing in complex hip problems, is an emeritus clinical professor at the University of Southern California. He received his medical degree from St. Louis University and a master of science degree in orthopaedic surgery from the University of Iowa.

■ **Philip C. Anderson, M.D.**, professor and director of dermatology, has accepted the chairmanship of the Literature Committee at the National Library of Medicine effective July 1, 1991. In January, Anderson served as a visiting professor at Harvard University.

■ **Frank X. O'Sullivan, M.D.**, assistant professor in the department of medicine's division of immunology and rheumatology, has been awarded a three-year grant totaling $318,500 for his work in "T-cell Mechanisms and Neutrophil Function in Autoimmunity" by the Department of Veterans Affairs.

Washington University

■ Homeless, substance-abusing women and their children will get help establishing productive, drug-free lives through an unusual partnership formed by Washington University, St. Louis University and several community agencies that serve the homeless.

The new project, which has received $3.1 million in funding from the National Institute on Alcohol Abuse and Alcoholism (NIAAA), will provide treatment to help young women with children break the cycle of homelessness and substance abuse. Some 240 St. Louis-area women with 600 children will be served by the project, which was expected to begin in February.

Researchers at Washington University School of Medicine and St. Louis University Medical Center will examine the effectiveness of four programs, each offering different combination of services. The Washington University team will work with Grace Hill Neighborhood Services, which will operate two programs, while the St. Louis University team will work with the Salvation Army and its two programs.

Grace Hill will offer the first program in this area to allow substance-abusing women to keep their children as they get treatment, according to Washington University's **Elizabeth M. Smith, Ph.D.**, the project's principal investigator. The idea is to go beyond help offered in typical shelters. The teams want to help these women not only recover from alcohol and drug problems, but also learn how to achieve economic and residential stability in their lives.

Co-principal investigator is **Sharon M. Homan, Ph.D.**, of the Center for Health Services Education and Research at St. Louis University Medical Center.

■ The National Institute of Health has provided $4.2 million in additional funding to the Center for Molecular design at Washington University in St. Louis to continue research on computer-aided drug design.

Computer-aided drug design uses computer graphics and molecular modeling to streamline the process of drug development. The technique allows scientists to predict the viability of a new drug by manipulating a model of its receptor, or target, on a video screen.

The five-year project grant supports collaborative projects of a multi-disciplinary team of scientists, according to principal investigator **Garland R. Marshall, Ph.D.**, director of the Center of Molecular Design. Investigators funded through the project grant include Marshall, professor of pharmacology, biochemistry and molecular biophysics; **Jay Ponder, Ph.D.**, assistant professor of biochemistry and molecular biophysics; **Kevin Moeller, Ph.D.**, assistant professor of chemistry; **Richard A. Dammkoehler, M.S.**, professor of computer science; and **Bruce Nock, Ph.D.**, assistant professor of psychiatry and anatomy and neurobiology.

■ **Susan S. Deusinger, Ph.D.**, has been named assistant professor and director of the Program in Physical Therapy at Washington University School of Medicine and the Department of Physical Therapy at the School of Medicine's Irene Walter Johnson Institute of Rehabilitation (IWJ).

She had been acting director of the physical therapy program since August 1988. Deusinger, whose practice is primarily pediatric rehabilitation, joined the faculty in 1978 as a physical therapy instructor and academic coordinator of clinical education. She helped develop an interdisciplinary doctoral program in movement, which began in 1989 at the University, and she has also been responsible for curriculum planning and administration of the entry-level educational program.

She served as President of the Missouri Physical Therapy Association from 1986 through 1990.

St. Louis University

■ "Work Out, Breathe Right," has already been called a success by several asthmatics who participated in a 12-week pilot class completed recently at St. Louis University Medical Center. The program, developed by the division of allergy and immunology, is the only one of its kind in the region.

The program teaches participants how to properly work out and breathe in order to improve asthma control as well as cardiovascular fitness. Medically-supervised exercise classes are offered along with educational lectures on such topics as nutrition and stress.

Ellen L. Garibaldi, M.D., assistant professor of internal medicine, is the program director. According to Dr. Garibaldi, as a result of the program, all participants achieved the ability to block their exercise-induced asthma and maintain their cardiovascular aerobic conditioning through walking and biking. Most importantly, the participants learned self-management techniques that enabled them to lose their fear of unpredictable asthma flares.

■ St. Louis University School of Medicine researchers say a minimally invasive way to treat male infertility has been shown to dramatically increase the sperm count in two out of three males suffering from infertility. Even more striking, the procedure, an adaptation of the laparoscopic surgical technique, allows patients to return to work within two to three days after treatment instead of the normal three weeks following conventional surgery.

According to **Donald J. Mehan, M.D.**, professor of urology at St. Louis University School of Medicine, the technique shows great promise for enhancing fertility in males.

Laparoscopy is currently used in a wide variety of gynecological and gastrointestinal procedures. It involves the use of an instrument called a laparoscope that is inserted into the abdomen. The instrument allows surgeons to visually examine, biopsy and treat problems within a patient's pelvis.

To enhance male fertility, Dr. Mehan and his colleagues are using laparoscopy to treat abnormally dilated veins, called varicoceles, leading to the testicles, one of the primary causes of male infertility. Patients undergoing this procedure can go home the same day of treatment with decidely minimal discomfort.

Dr. Mehan, **Raul O. Parra, M.D.**, associate professor of surgery and director of the division of urology, and **Charles H. Andrus, M.D.**, assistant professor of surgery at St. Louis University School of Medicine, perform the procedure. They have been researching the technique since August 1990 and will present their findings at the national meeting of the American Urological Association in Toronto in June.

■ The division of experimental surgery at St. Louis University School of Medicine was recently reorganized and renamed the Surgical Research Institute (SRI). **Michael Kurtz** has been appointed division manager of the SRI. Major expansion of space and equipment will encourage increased faculty research. In conjunction with the facelift of the facilities, **Al Li Ph.D.**, a researcher at Monsanto Company, presented a plaque of appreciation from Monsanto Corporate Research and G.D. Searle Company, a Monsanto subsidiary, to **Donald L. Kaminski, M.D.**, professor of surgery and director of the general surgery division. The plaque recognized Dr. Kaminski's "insight in establishing a liver cell research program at SLU School of Medicine in collaboration with researchers at Monsanto." The two sides are researching innovative therapeutic approaches to liver disease, including the possibility of developing a liver dialysis machine.

In addition to the appreciation plaque, Monsanto Corporate Research and G.D. Searle presented a $10,000 donation to the SRI to fund various research projects.

■ A multi-million dollar grant has been awarded to several local institutions and agencies in an effort to try to break the cycle of homelessness and substance abuse among homeless women and their children.

The three-year study is funded by a $3.1 million grant from the National Institute on Alcohol Abuse and Alcoholism (NIAAA). St. Louis University Medical Center, Washington University School of Medicine, the Salvation Army and Grace Hill are all participating in the extensive research project.

Participants from St. Louis University Medical Center include: **Sharon M. Homan, Ph.D.**, co-investigator, **Barbara Arrington, Ph.D.**, assistant professor of hospital and health care administration in CHSER (Center for Health Services Education and Research), and **Louise H. Flick, Ph.D.**, asssociate professor of nursing at St. Louis University School of Nursing.

■ Nasal disease has been found to be common in the elderly, but is a complaint often overlooked or ignored, says a new study completed by researchers at St. Louis University School of Medicine.

According to co-investigator, **Howard M. Druce, M.D.**, assistant professor of internal medicine in the division of allergy and immunology and assistant professor of otolaryngology, the study suggests there is a high prevalence of allergic and non-allergic rhinitis as well as undiagnosed cases of sinusitis in elderly patients.

Results of the research were presented at the 47th annual meeting of the American College of Allergy and Immunology in San Francisco. Further physiological studies will be conducted to determine why elderly patients suffer from nasal problems.

In a separate study, Dr. Druce and his colleagues have found that there is no apparent connection between the cause of Alzheimer's disease and common nasal diseases.

The study, funded by a $20,000 grant from the state of Missouri, examined 28 subjects over a 12-month period. Members of the department of psychiatry and human behavior's division of geriatric psychiatry at St. Louis University School of Medicine collaborated on the study with Dr. Druce. They include **George T. Grossberg, M.D.**, professor and director of the division; **Michelle Russell, Ph.D.**, instructor; **Jane Colt**, research assistant; and **Velva Woodward, R.N.**, former coordinator of the Brain Bank.

■ Bethesda Eye Institute (BEI) at St. Louis University Medical Center has been awarded a $50,000 unrestricted grant by Research to Prevent Blindness (RPB). The grant was received by **David J. Schanzlin, M.D.**, professor and chairman of the department of ophthalmology, St. Louis University School of Medicine, and chief executive officer of BEI.

The award will be used for advanced research into the prevention and treatment of sight-threatening diseases, and will aid ophthalmic experts at BEI in exploring new avenues in achieving a better understanding of the eye and its diseases.

RPB is the world's leading voluntary organization in support of eye research, and presents grants annually to 64 medical schools. Previous grants and awards given to BEI from this organization total $164,000.

■ **William S. Sly, M.D.**, professor and chairman of the Edward A. Doisy department of biochemistry and molecular biology, is one of two St. Louis researchers chosen to receive the medical profession's highly coveted 1991 Passano Foundation Award. The Passano Award is given each year to researchers who have made outstanding contributions to the advancement of medical science and whose associated work was done in the United States. Prime consideration is given to work that has immediate clinical value or gives promise of practical application in the near future.

Dr. Sly and co-recipient **Stuart A. Kornfeld, M.D.**, professor of medicine, biochemistry and molecular biophysics at Washington University School of Medicine, are the first St. Louis researchers to receive the award, which has been given annually since 1945. Working independently, the two have produced discoveries with broad relevance to cell biology and human disease.

The Passano award will be presented during the annual *Passano Foundation Lecture* to be held in Baltimore in April.

■ A medical research endowment fund has been established at St. Louis University School of Medicine in honor of **Clement J. Sullivan, M.D.**, clinical professor of internal medicine in the division of allergy and immunology. The fund was created to recognize Dr. Sullivan, 80, for his 67 years of continued service to the St. Louis University community and his extensive knowledge of the allergy research field.

Dr. Sullivan graduated from St. Louis University in 1929 and earned his medical degree from the School of Medicine in 1933. In 1938, he became the first full-time faculty member of the School of Medicine to head an allergy clinic at the Hospital.

The *Clement J. Sullivan Allergy Medical Research Endowment* fund will help finance new and continuing allergy studies at St. Louis University School of Medicine. Former students, colleagues, family and friends of Dr. Sullivan made the initial contributions.

■ **John B. Holds, M.D.**, has been appointed assistant professor in the department of ophthalmology, with a secondary appointment as assistant professor in the department of otolaryngology, St. Louis University School of Medicine. The announcement was made by **David J. Schanzlin, M.D.**, professor and chairman of the department of ophthalmology and director of Bethesda Eye Institute.

Dr. Holds' specialty is in occuloplastics, or ophthalmic plastic surgery, and his appointment will strengthen the Institute's efforts to offer area practitioners and their patients a broad range of subspecialty services.

MSMA 133rd Annual Convention Preliminary Program Page 161

New Members

■ **Loretta M. Britton, M.D.,** Swope Parkway Comprehensive Health Central, 4900 Swope Parkway, Kansas City 64105, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. Britton received her preliminary education at Fisk University and obtained her medical degree at Howard University College of Medicine in 1982. She completed her residency at D.C. General Hospital and Howard University Hospitals, Washington, D.C. Dr. Britton specializes in pediatrics.

■ **Elizabeth E. Dean, D.O.,** 110 W. Mill, Rock Port 64482, has become a member of the Northwest Missouri County Medical Society. Dr. Dean received her preliminary education at the University of Tulsa and obtained her osteopathic degree at the Oklahoma State University College of Osteopathic Medicine in 1988. She completed her residency at Tulsa Regional Medical Center, Tulsa, OK. Dr. Dean specializes in general practice.

■ **Becky A. Heide, M.D.,** P.O. Box 187CB, Osage Beach 65065, has become a member of the Lake of the Ozarks County Medical Society. Dr. Heide received her preliminary education and obtained her medical degree at the University of Missouri-Kansas City in 1984. She completed her residency at Truman Medical Center-East, Kansas City, MO. Dr. Heide specializes in obstetrics/gynecology.

■ **Stephen A. Ortega, M.D.,** 2817 McClelland Blvd., Suite 214, Joplin 64804, has become a member of the Jasper County Medical Society. Dr. Ortega received his preliminary education at Coe College and obtained his medical degree at the University of Iowa in 1983. He completed his residency at the University of Kansas Medical Center, Kansas City, KS. Dr. Ortega specializes in neurology.

■ **Joseph J. Roh, M.D.,** Truman-Forest Professional Bldg, 1515 Truman Road, Suite 402, Independence 64050, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. Roh received his preliminary education at the University of Nebraska and obtained his medical degree at the University of Nebraska School of Medicine in 1981. He completed his residency at the University of Nebraska Medical Center, Omaha, NE. Dr. Roh specializes in general surgery.

■ **Suseela Samudrala, M.D.,** 11133 Dunn Rd., Suite 13-201A, St. Louis 63136, has become a member of the St. Louis Metropolitan Medical Society. Dr. Samudrala received her preliminary education at Padmavathi College of India and obtained her medical degree at Kurnool Medical College of India in 1972. She completed her residency at Jewish Hospital, St. Louis, MO. Dr. Samudrala specializes in physical medicine and rehabilitation.

■ **John M. Schmitz, M.D.,** Midwest Psychiatric Consultants, P.C., 6400 Prospect, #100, Kansas City 64132, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. Schmitz received his preliminary education at the University of Wisconsin and obtained his medical degree at the University of Wisconsin Medical School in 1985. He completed his residency at Rush Presbyterian-St. Luke's Hospital, Chicago, IL. Dr. Schmitz specializes in psychiatry.

■ **Michael C. Stiles, M.D.,** Eye Consultants, Inc., 2900 Baltimore, Suite 650, Kansas City 64108, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. Stiles received his preliminary education at the University of Notre Dame and obtained his medical degree at the University of Kansas School of Medicine in 1985. He completed his residency at the University of Kansas School of Medicine, Kansas City, KS. Dr. Stiles specializes in ophthalmology.

■ **Mark B. Williamson, Jr., M.D.,** Children's Mercy Hospital, 24th & Gillham Rd., Kansas City 64108, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. Williamson received his preliminary education at Georgetown College and obtained his medical degree at the University of Tennessee Center for Health Sciences in 1982. He completed his residency at Erlanger Medical Center, Chattanooga, TN. Dr. Williamson specializes in pediatric orthopedics.

■ **Sanjay S. Yadav, M.D.,** Consultants in Neurology, 4320 Wornall Road, Suite 52-11, Kansas City 64111, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. Yadav received his preliminary education at Yale and obtained his medical degree at the West Virginia University Medical School in 1983. He completed his residency at Duke Medical Center, Durham, NC. Dr. Yadav specializes in neurology.

■ **Michael E. Yuhas, M.D.,** 1030 McIntosh Circle Drive, Suite 4, Joplin 64804, has become a member of the Jasper County Medical Society. Dr. Yuhas received his preliminary education and obtained his medical degree at the University of Missouri-Kansas City in 1986. He completed his residency at Cleveland Clinic Foundation, Cleveland, OH. Dr. Yuhas specializes in internal medicine.

■ Resident Section

Amy L. Atchison, M.D. — *internal medicine*
Dana S. Bacon, M.D. — *internal medicine*
John B. Bedotto, M.D. — *cardiovascular diseases*
John F. Doane, M.D. — *internal medicine*
Michael R.K. Jacoby, M.D. — *internal medicine*
Joo Hoon Kim, M.D. — *obstetrics/gynecology*
James P. McGraw, M.D. — *internal medicine*
Shawn C. Merys, M.D. — *anesthesiology*

Marc S. Milsten, M.D. — *surgery*
Linda E. Mueller, M.D. — *internal medicine*
Nasreen A. Syed, M.D. — *internal medicine*
Timothy A. Walline, M.D. — *internal medicine*
Mark B. Yagan, M.D. — *internal medicine*

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Agnieszka A. Ardelt
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References:
1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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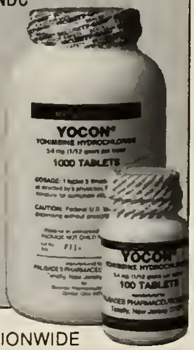

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In Memoriam

■ **Warren C. Baker, M.D.**, died November 18, 1990 at the age of 69. Dr. Baker, a family practitioner, practiced medicine in Savannah for 35 years. He was a Navy veteran of World War II. He obtained his medical degree at the University of Arkansas School of Medicine in 1952. Dr. Baker was a member of the Andrews County Medical Society.

■ **Russell J. Comer, M.D.**, died November 25, 1990 at the age of 54. Dr. Comer, a radiologist, practiced medicine for 18 years at the Hannibal Regional Hospital and the Hannibal Clinic. He was a veteran of the Navy and served during the Vietnam War. He obtained his medical degree at the University of Kansas Medical School in 1972. Dr. Comer was a member of the Northeast Missouri County Medical Society.

■ **H.B. Ivy, M.D.**, died January 25, 1991 at the age of 79. Dr. Ivy, an ophthalmologist, practiced medicine in Springfield for almost 30 years. He retired in 1981, but remained active in medicine. He served on the staffs of Cox Medical Center, Park Central Hospital and St. John's Regional Health Center. He obtained his medical degree at the University of Kansas Medical School in 1945. Dr. Ivy was a member of the Greene County Medical Society.

■ **Javier A. Pichardo, M.D.**, died October 22, 1990 at the age of 77. Dr. Pichardo, a pediatrician, practiced medicine in St. Peters. He obtained his medical degree at the Institution of Medicine, Havana, Cuba in 1941. Dr. Pichardo was a member of the Mineral Area County Medical Society.

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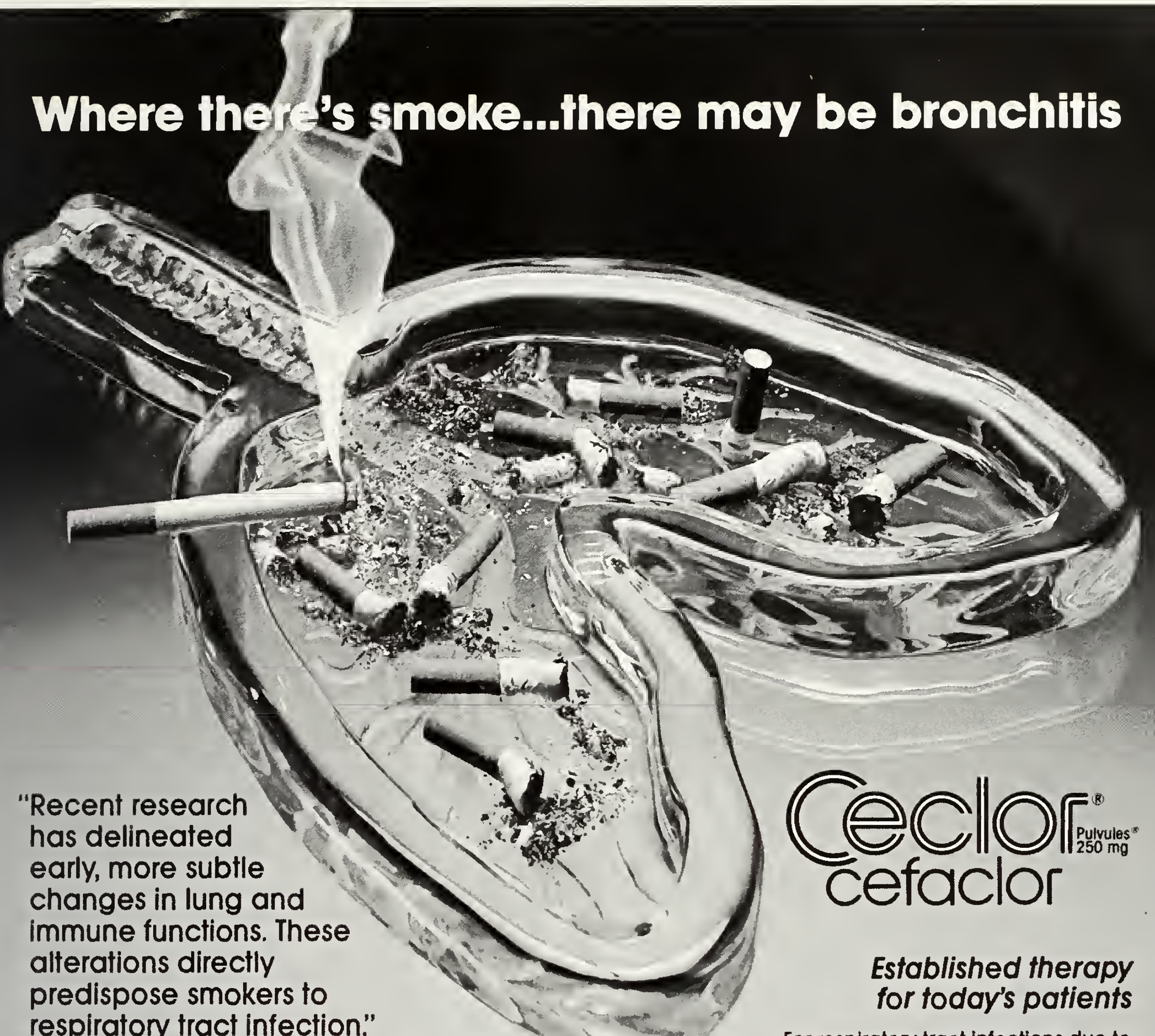

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- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
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- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
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Adverse Reactions: (percentage of patients)

Therapy-related adverse reactions are uncommon. Those reported include:
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- Stevens-Johnson syndrome, toxic epidermal necrolysis, and anaphylaxis have been reported rarely. Anaphylaxis may be more common in patients with a history of penicillin allergy.
- Gastrointestinal (mostly diarrhea): 2.5%
- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
- As with some penicillins and some other cephalosporins, transient hepatitis and cholestatic jaundice have been reported rarely.
- Rarely, reversible hyperactivity, nervousness, insomnia, confusion, hypertonia, dizziness, and somnolence have been reported.
- Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1% and, rarely, thrombocytopenia and reversible interstitial nephritis.

Abnormalities in laboratory results of uncertain etiology.
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Journal of the Missouri State Medical Association

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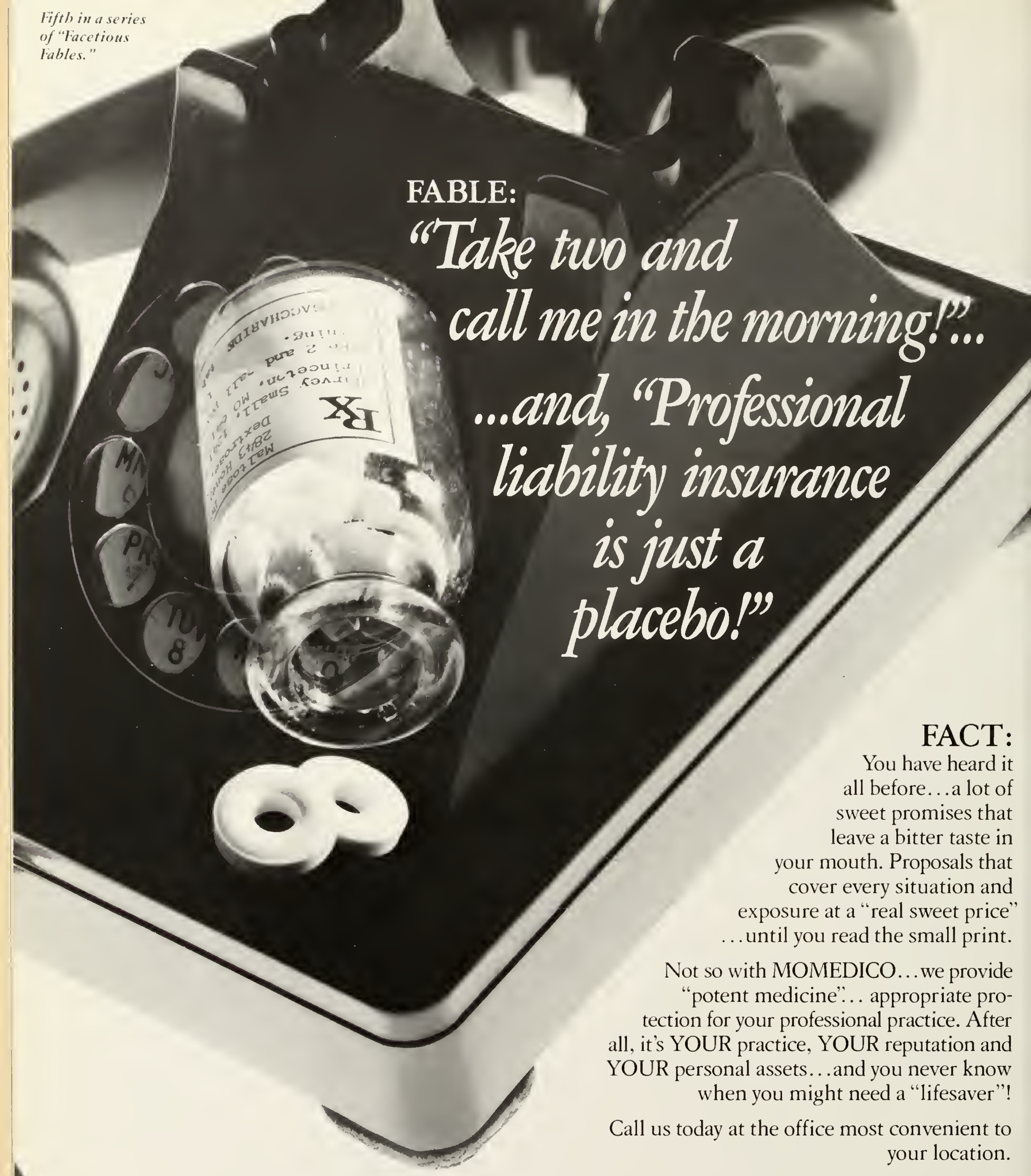

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"Flowers For Julie," is a watercolor painting by **John Fries, M.D.**, of St. Louis, MO. Dr. Fries used the wet watercolor technique with glazing, which means that one transparent layer of color is applied over the one before only after the previous color is completely dry. This produces a color otherwise unattainable. Dr. Fries is a clinical professor of radiology at St. Louis University.

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GUEST EDITORIAL

by Matthew Budd, M.D., Cambridge, MA

In times of adversity, it may be that listening is the best thing we as physicians can do for our patients.

"These Are the Times that Try Men's Souls" . . . And Their Bodies

We are finishing up a painful and bloody war and continue in the midst of a deepening economic recession that probably will not be brief. In such times, pervasive social mood changes occur that affect us all, including our patients. War often triggers moods of fear and even panic; recession is accompanied by insecurity about the future, helplessness, and even resignation.

These shifts in social mood envelop our patients, and may be accompanied by physical illness, or complaints. Recognizing the central role of mood in the generation of physical changes has the potential of making us a useful resource for our patients. Additionally, listening to the true nature of the patient's suffering will help us to build a relationship of empathy, and even open the possibility of learning. Consider the following cases.

Ann is a 48-year-old woman with stable and controlled hypertension. She came in recently for a routine visit with a blood pressure reading of 160/108. There were no clear reasons for the loss of control; she said her life was "fine." She reported that she began to feel tense in August. I said, "war is terrifying," and she began to cry. In truth, she said, she was afraid all the time, even when she was sleeping. We talked about other times in her life when she was afraid, like the time preceding her marriage when she began to see that her interpretation of the future had something to do with her mood, and was sometimes not well-grounded. We adjusted her medications, and she asked if we could meet again to talk about fear. She reported satisfaction with the visit and said she felt less tense than she had in weeks.

Tim is a 47-year-old man. He complains of chest pain that began in early January. Diagnostic studies including ETT and EKG have been normal. The pains have continued. During the course of conversation, he revealed he was a Vietnam veteran, and that the conflict in the Persian Gulf had brought up unpleasant memories of the Vietnam War. It bothered him a great deal, he said, that he had these chest pains although he was not actually ill. He said it made him feel "crazy," or out of control. We talked about fear and expression of fear in the body; in light of his history, it was not surprising that fear reactions were occurring. This might be interpreted that his body had merely learned well, and was reacting normally. He was somewhat relieved by this as indicated by his willingness to enroll in the "Ways to Wellness" Program, and to begin to exercise and meditate regularly in order to relax his body.

Mary is a 42-year-old mother of two with a 30-pound weight gain over the last four

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Guest Editorial
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months. She reported being depressed when she lost her job four months earlier; now things were worse as her architect husband was finishing his current assignment and about to lose his job. She said that the future looked hopeless to her. We acknowledged that there was not much we could do about the economy, but I asked her to enumerate the areas in her life in which she still could act with satisfaction. She listed family, community, church projects, etc . . . and said, "I could get back into shape." She reports to me on the phone each Tuesday morning about the progress she is making in her weight loss and exercise program. Her mood is improving.

What lessons can we learn from these three people that might help us as clinicians in dealing with the increased suffering at this trying time? The following may be just a few:

1. Events often trigger a judgment of blame, helplessness, or hopelessness.
2. These reactions are social, on the one hand, but also personal in that for specific individuals they represent lifelong patterns of dealing with stress.
3. There are mood shifts associated with these judgments: anger and resentment associated with blame; panic and anxiety associated with helplessness; and resignation associated with hopelessness.
4. These mood shifts are often associated with physical symptoms which are "real" for the patient, but may not represent disease, or may effect already existing disease. Treating the symptom or disease while neglecting the mood may be wasteful and ineffective.
5. Listening to the patient's concerns and interpretations of their moods and mood shifts may be therapeutic and may open the opportunity for valuable learning.

In these trying times, the challenge to us as clinicians is to further the development of our listening skills (not just hearing) so as to be more useful to our patients and more appropriate in our use of resources. This will allow us to experience the satisfaction of being useful to our patients in a way made possible by virtue of our chosen profession of medicine.

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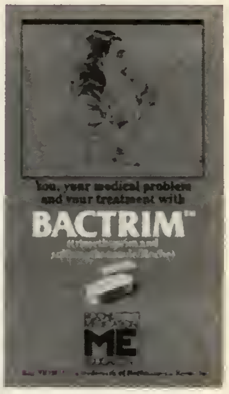
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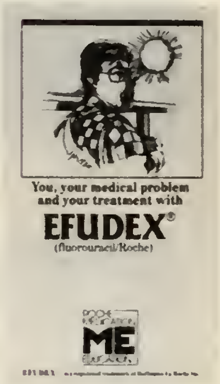
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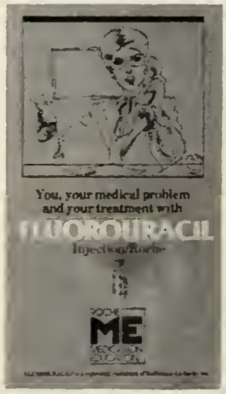
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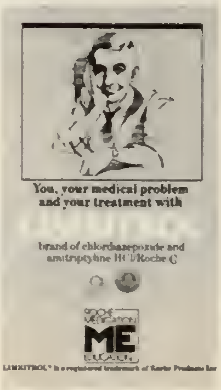
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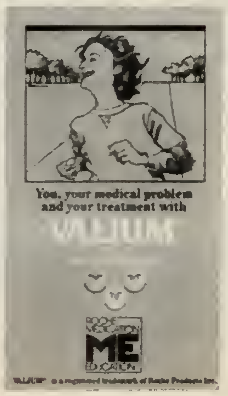
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GUEST EDITORIAL

by William C. Banton, III, M.D.

In Missouri, as well as across the United States, incidence of TB is on the rise. Physicians must be aware of ways to slow and eventually halt the development of this curable and preventable disease. The Tuberculosis Awareness Program is one way to gain vital information.

Rise in TB Cases Reported for 1990

APR 19 1991

The above headline is now appearing in newspapers and journals throughout the United States, as we enter the year 1991. "Tuberculosis, the Disease That Refuses to Die," is the realistic theme of Missouri's 6th Annual "Tuberculosis Awareness Program," to be held April 8-19, 1991. After a steady 30-year decline, Missouri and the United States is experiencing an increase in new cases. Provisional reports for 1990 reveal an increase in new cases in Missouri from 279 in 1989 to 313 in 1990. For the United States as a whole, there has been an increase from 23,495 in 1989 to 23,720 cases in 1990, and the CDC expects 1,000 or more to be reported.

In reporting the provisional United States tuberculosis data, Dr. Dixie Snider, Director of the Division for TB Elimination at the Centers for Disease Control, recently stated that, "It is completely unprecedented in what tuberculosis has actually been doing since the last century, and the most disturbing thing that has happened this year is the apparent increase in drug resistant TB — cases of TB that have developed resistance to the most common anti-TB drugs." Dr. Snider will be the featured speaker at this year's day-long symposium to be held on Thursday, April 18, 1991 at the St. Louis Metropolitan Medical Society Auditorium.

The TB Awareness Program is sponsored by the American Lung Associations of Missouri, in cooperation with the Missouri Department of Health and the Missouri Advisory Committee for the Elimination of Tuberculosis. This is a tuberculosis information and educational program for health professionals as well as the general public.

It is one component of Missouri's "action design" to implement the United States Centers for Disease Control's new strategic plan that outlines a nationwide strategy for the elimination of tuberculosis from the United States by the year 2010, (World Health Organization [WHO] definition of elimination is one case per million population).

The TB Awareness Program focuses on alerting the public as well as the medical profession that this preventable and curable disease is still a significant health problem, both in Missouri and worldwide. This is accomplished by two weeks of activity, consisting of TB health education in various media, conferences, hospital grand rounds and special exhibits in area hospitals. Worldwide, tuberculosis remains the leading cause of death with three million people dying yearly, with eight million new cases of tuberculosis developing yearly (half of which are highly infectious pulmonary cases) and with 15-20 million cases existing at any one time. In addition, it is estimated that two billion of

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five billion persons of the world population are infected with the tuberculosis organism.

It is estimated further that the "TB infected" numbers 10 million in the United States and a quarter of a million in Missouri.

Beginning February 28, 1991, "TB infection in Missouri," as documented by a positive Mantoux Tuberculin skin test, became reportable (by the Missouri Department of Health regulations) to local and state public health authorities.

Why has tuberculosis not been eliminated as a significant public health problem? There are many reasons, but the main reasons are:

1. Most health care providers and the general public have the misconception that anti-TB drugs have already eliminated TB.
2. Lifetime survivability in the human host. For almost 7,000 years, the TB germ has possessed the ability to remain alive in the human body for a lifetime without causing symptoms, being held in check only by the strength of the body's immune sytem and resistant factors. When the immune system is damaged, reactivation of TB disease occurs.
3. Increases in TB high risk population groups, i.e., recent immigrants from countries of high TB prevalence, the elderly, and the socially and medically disadvantaged.
4. The epidemic of AIDS and HIV infection, which is catastrophic to the immune system.
5. Non-compliance with prescribed anti-TB therapy resulting in disease relapses.
6. Increased emergence of tuberculosis drug-resistant organisms.

To eliminate TB by the year 2010, our community must constantly think about TB. Our physicians must treat TB disease and TB infection promptly with "modern" anti-TB drugs for six months and our patients must take those drugs daily for six months. We have to take aggressive measures *now* and stop TB before it gets started again.

■

Editor's Note: Dr. Banton, an internal medicine specialist, serves as a state consultant on tuberculosis. He also heads the Missouri Advisory Committee to Eradicate Tuberculosis.

FYI

Health care workers number 7.5 million — more than 6% of the total private labor force in America.

Source: Bureau of Labor Statistics

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EDITOR'S DESK

by Donald G. Sessions, M.D.
Editor

What's This All About?

The time is several years ago, during spring. I am in my office on the ninth floor and through a closed window, I hear a loud crash followed by screams. I continue to work, yet the screams continue. I get up from my desk and look out the window. There is a busy three-way intersection down below and despite the stop signs, cars occasionally run into each other. I have observed everything from fist fights to a full cardiopulmonary resuscitation on that street below my window. However, I am fully unprepared for today's main event. As I look down, I see a small group of people looking up to my right. I can't see what they are looking at so I open my window and lean my head out to look. There is a woman sitting on the edge of an open window several floors up from me in another building. She is screaming and inching out as if to jump.

The crowd in the street grows with each passing minute. Their heads crane to see the lady on the ledge. I realize what is happening and go back to my desk to work. "I am no voyeur, getting my kicks watching some stranger jump out of an 11-story window," I say to myself. The screaming continues.

I can't think of anything, except what will happen next. I am ineluctably drawn back to the window, which I obviously had not closed upon my initial retreat. I notice that the fire department has arrived. It is clear that their ladders will not reach the lady on the ledge. Firemen unwrap a large white circle of canvas and ring it directly under the window. From my vantage point, this is totally absurd. "If she jumps, she'll probably miss it," I think to myself. "What if she did jump? Would I watch or turn away?"

I realize that I have no choice in watching this drama as it unfolds before my eyes. "This is crazy," I say to myself, "I've got important work to do." However, I am magnetized by the scene and its possibilities.

The crowd grows still larger. It is very quiet. All faces turn upward. The lady screams again and edges out a little more. Someone is talking to her behind the open window. Time stands still. The lady is helped off the ledge by a dark shadow. She goes in body first, followed by her legs and feet. The drama is over now. I don't know what to do with it. I am exhausted, and it is actually time for my office hours to start . . . .

It is a Wednesday night, and I am watching CNN. The now famous "Boys from Baghdad" describe the beginning of the War in the Persian Gulf. Peter Arnett, Bernard Shaw, and John Holloman literally live the bombing for us as we experience the war vicariously through their reports.

Iraqi security guards arrive at the door and order them

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below to the hotel's bomb shelter. Although they claim claustrophobia, they continue reporting. Is this really happening? I am riveted to the screen, totally engrossed in the "live" television coverage of a war occurring in the middle of the night on the other side of the planet. "Certainly the Iraqis must know that live reports are coming from the El Raschid Hotel in downtown Baghdad," I say to myself." From the looks of the aerial display fixed on the screen, it appears that the Iraqis have their hands full. I watch well into the night. I am filled with fear, curiousity and excitement. The drama is unsurpassed. What will happen next?

The next night I turn back to CNN and am amazed at the coverage. The following night is more of the same intense coverage, except each report is unique, never quite the same as the night before. It is clear to me that I am a prisoner of the "War in the Gulf mini-series." It becomes a full-fledged series with each passing night of reports. I am compelled to watch. It is more than morbid curiousity. It becomes imperative that I watch. I learn a whole new jargon. I see Patriot missiles chewing up Scud missiles like Pac-Man. I see television announcers hurriedly putting on gas masks as they continue to work. Thankfully, the President calls an end to the "series" by declaring that we have won the war in a rout. I am exhausted, but now I can get back to regular life.

What's this all about? What is the human phenomenon that explains how we get caught up in observing dangerous experiences involving life on the edge? It must occur at a very primal level for it happens right inside our bodies. Despite my thoughts about how absurd, even how weird it is to watch these actions, I noticed that I placed my body in perfect position to continue to observe. Perhaps it is the excitement of being in the midst of real action — not fictional action. Maybe it is just the not knowing how it's going to turn out and be resolved. Perhaps it is this type of reaction that enticed me to be a surgeon. In thinking about it, it's probably very much like the feeling I have when I take on a really tough surgical case and begin to wonder how it is going to turn out, or be resolved. Maybe, it's just the human need for mystery.

How is it that we choose to do what we do or be where we are or be who we are? Did we really have a choice in the matter? If we didn't choose, who did? ■

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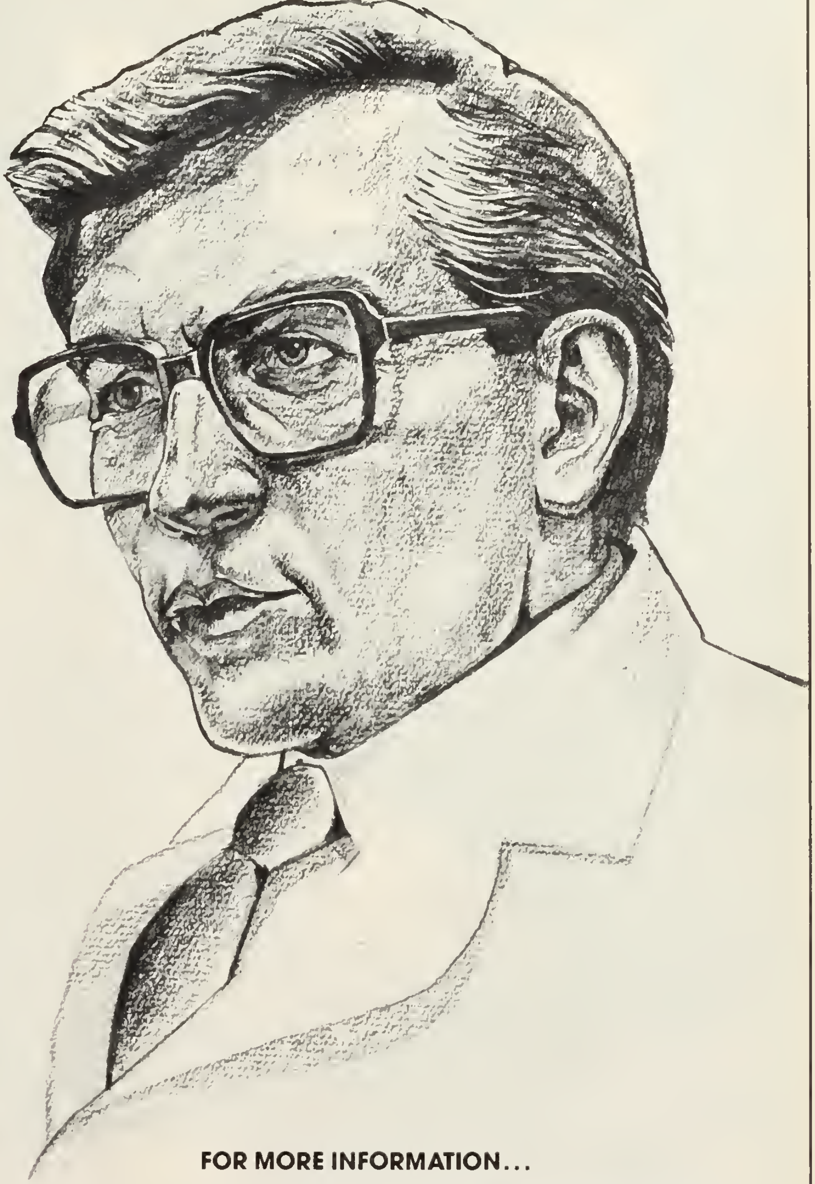

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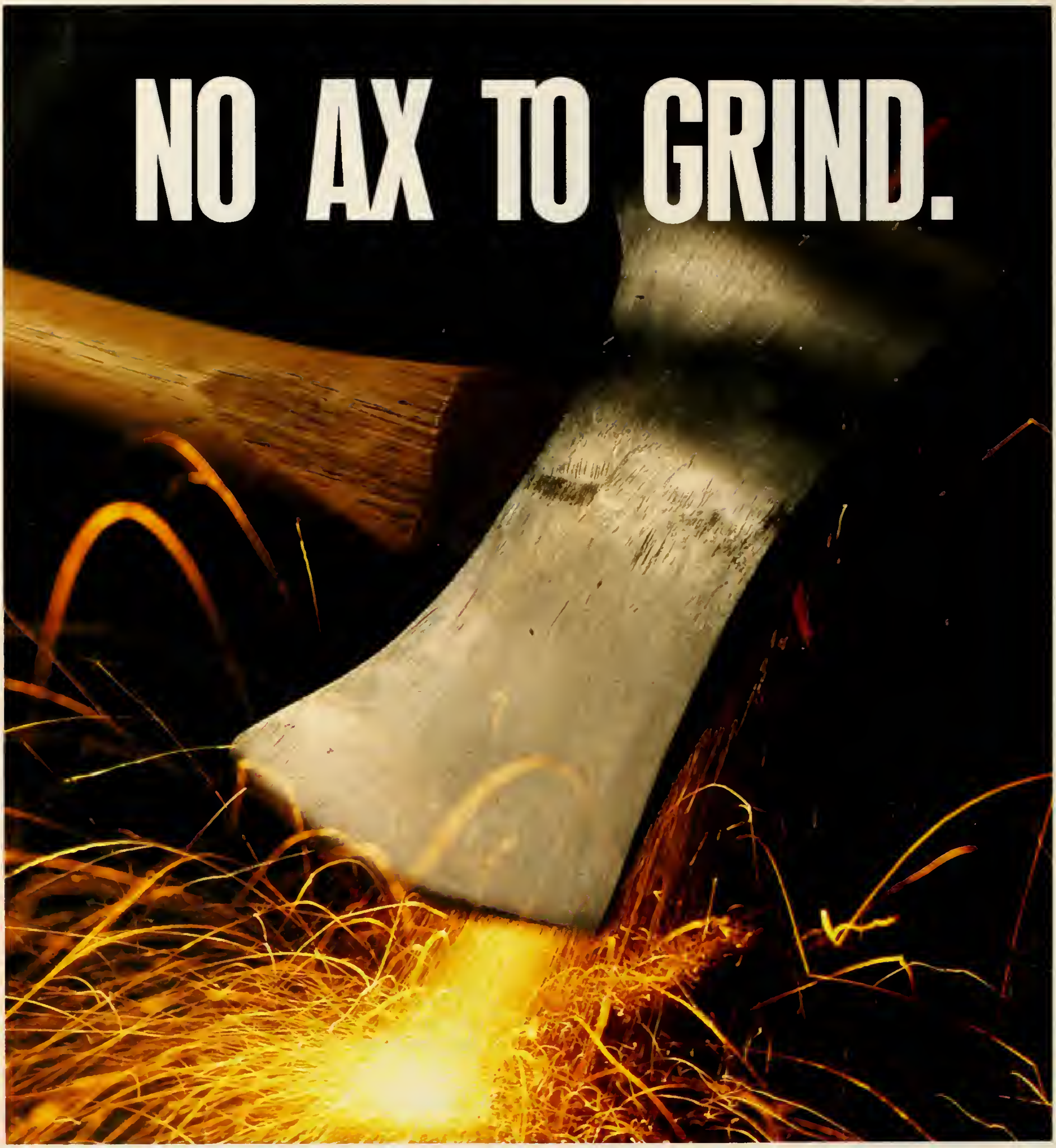

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PRESIDENT'S PAGE

by Gary A. Dyer, M.D.
MSMA President

Physicians: Will you define your profession for the future, or will someone else define it for you?

Democracy is Not A Pretty Sight

Politics, according to Aristotle,[1] is the science that studies the supreme good for man. More than 2300 years ago he said that under this inexact science come those most highly esteemed faculties (arts of war, public speaking, and property management). For many physicians, medicine is above politics and the Aristotelian view is a pill too large to swallow. The same physicians seem to regard politics, at its worst, as a dirty word bringing to the surface slimy thoughts of special interest, waste, and corruption; at its best, it conjures images suggesting manipulation, negotiation, or compromise. These practitioners of the inexact science of medicine view the shapeshifting of politics as something to be shunned. To support such a process with money or actual personal participation seems to be a sin equivalent to stealing. For the good of medicine, and, I would suggest, the good of the general public, physicians and spouses must, in large numbers, become vigorously involved in the political process.

The Missouri Medical Political Action Committee (MMPAC), as part of its ongoing effort to improve grassroots political action, recently sponsored an excellent AMPAC Constituent Skills Workshop for Missouri physicians. A number of the ideas presented in that workshop are the basis for this President's Page. Michael Dunn,[2] faculty director of the workshop delivered a sobering introduction. The future of medicine, he says, will *not* be determined by how well physicians do their jobs; it will *not* be determined by how thoroughly trained physicians leave medical schools and residencies. Likewise, the future of medicine will *not* be determined by innovations in technology or drug therapy. The future of medicine *will* be determined by federal and state legislators, and those individuals and groups that influence the vote of those legislators. "Will you define your profession for the future or will someone else define it for you" was his pointed challenge.

Democracy is a continually changing process in this country. The process is not now and has never been a pretty sight to see, but it still works. Dunn says that ours is becoming a highly competitive special interest democracy in which there are definite winners and losers with every bill signed into law. Is medicine now a winner or a loser? Where will it be in the future? In this democracy, those with the least political clout are those who never go out and vote. They have no influence. The AMA has reported that only 45% of physicians are registered to vote. Therefore, at least 55% have no influence. Those with the next least political clout are those who don't do anything but vote! I believe another large group of physicians and their spouses are included in this latter group.

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President's Page

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The players in the current democratic process are those able to effectively coalesce about similar concerns. Dunn would suggest the rest are losers. Groups formed by coalescence exert power directly related to the activities of each individual member of the group. Where is medicine? On the present American scene, the American Medical Political Action Committee (AMPAC) is one of the most respected, powerful, and politically effective of such groups. One major reason for this effectiveness is its very sophisticated constituent-based grassroots political action Key Contact Program.

In our democracy the methods of impacting the process are constantly changing. PACs, whether you personally like them or not, have fundamentally altered the way policy is made in Congress. According to Dunn, they are not going away. Political campaigns are costly. PACs provide low cost money to candidates as compared to funds raised through individual contact (about 50% of the latter are used in raising the funds). Medicine, and individual physicians must face this changing reality.

Physicians and their spouses have tremendous latent political power. Exercising this power is relatively simple, but it does take commitment. The following steps are suggested for each physician and spouse:

1. Register to vote
2. Vote at each election
3. Contribute to a political campaign
4. Help raise money and develop contacts for a candidate
5. Give your time to the nuts and bolts of a campaign (yard signs, phone banks, etc...)
6. Become a Key Contact for your legislator
7. Become informed about the issues facing medicine
8. Join MMPAC and AMPAC

The ultimate goal is to be able to influence your U.S. representatives and senators as well as your state representatives and senators. You will know you are in position to achieve that goal when each of those individuals knows you by name and asks for your views on medical issues. Need some help? An AMPAC Constituent Skills Workshop is a great way to start. Can't wait for the next one? Call the MSMA for assistance.

References

1. Aristotle. *The Ethics of Aristotle — The Nicomachean Ethics.* Translated by JAK Thomson, Penguin Books, 1976;(1):64.

2. Dunn, M: Micheal E. Dunn & Associates, Faculty, AMPAC *Constituent Skills Workshop.* November 10, 1990, Capitol Plaza Hotel, Jefferson City, MO.

■

WHAT YOU DON'T KNOW ABOUT ARTHRITIS CAN HURT YOU

S welling in one or more joints
E arly morning stiffness
R ecurring pain or tenderness in any joint
I nability to move a joint normally
O bvious redness and warmth in a joint
U nexplained weight loss, fever or weakness combined with joint pain
S ymptoms like these persisting for more than two weeks

If you have these warning signs, consult your family physician or rheumatologist, or call the Arthritis Foundation office nearest you

ARTHRITIS FOUNDATION

Food Fight Erupts in Neighborhood Supermarket

Produce section after recent food fight

Carrots, broccoli, tomatoes, even brussels sprouts were flying into grocery carts as **The Great American Food Fight Against Cancer** broke out in area supermarkets.

Consumers are reacting to studies which show that foods high in vitamins A and C, high in fiber and low in fat, may help reduce cancer risk.

"My husband is getting whole grain toast tomorrow morning," one shopper declared. A mother was seen throwing carrots into her bag. "Snacks for the kids," she said.

Grocers are, of course, delighted. "This food fight is pretty exciting," said one produce manager, "and there's nothing for me to clean up!"

The American Cancer Society, sponsor of the Food Fight, has more information. Call **1-800-ACS-2345.**

And, be on the lookout for Community Crusade volunteers armed with shopping lists.

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Public Service Message

PRACTICE MANAGEMENT

by Janice K. Woerth, Ph.D.

Do you have a question for Dr. Woerth? Include your questions along with your name, address and phone number and send them to:

Janice K. Woerth, Ph.D.
Practice Management
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Jefferson City, MO 65102
Or call her direct:
202/363-1780

Although your name will not be used in the journal, please include your name and phone number so that Dr. Woerth may contact you if she needs additional information to answer your question.

Dear Dr. Woerth:

How should I bill for an emergency in the office? I see codes in the CPT book for emergency services in the hospital, but I cannot find anything for the medical office.

L.E.J.

Dear L.E.J.:

Code 99058, "office services provided on an emergency basis," is the code used for medical office emergencies. This code is to be used in addition to the office visit code. If you use this code by itself, you will only be reimbursed for the emergency aspect of the service and not for the medical services rendered. This is a common billing error. There are instructions for use of the code at the beginning of the section of the CPT book titled "Special Services and Reports." The instructions explain that the special services and report codes are to be used "adjunct to basic services rendered."

Since your office has never used this code, you need to decide what is a fair fee for services rendered on an emergency basis. Some physicians feel uncomfortable billing an extra fee for emergency services. You do *not* have to charge for the services because the code exists. However, an office policy should be established stating that you either will or will not bill for office emergencies. This policy should then be applied equally to all patients.

Dear Dr. Woerth:

Frequently I am asked to give a second opinion on a diagnosis. How would I code for this?

Dr. D.F.

Dear Dr. D.F.:

There are special codes listed in the CPT book for second opinion consultations. They are confirmatory consultations, codes 90650-90654. You will notice that they are used "when a patient requests a second/third opinion on the necessity or appropriateness of a recommended medical treatment or surgical procedure." If the second opinion is mandated by a PRO or an insurance company, the modifier -32 should be added to the code. Modifier -32 indicates that the consultation is mandated.

Dear Readers:

A clarification regarding 1991 limiting charges that replaces the Maximum Allowable Actual Charge (MAAC) for physicians who do not participate with Medicare: In an earlier column, I stated that the 1991 limiting charges are not to exceed 125% of the 1990 MAAC. This is true for all services except those services considered evaluation and management services. Congress at the last minute increased the 1991 limiting charges on evaluation and management services to 140% of the 1990 MAAC.

You will not have to calculate these fees for your office. They are available on your Medicare profiles sent to your office in late January or early February.

■

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For Your Information:

Dog Bites

Although our canine companions can provide us with many hours of unyielding love and faithfulness, it is important to remember that these same loving creatures inflict 500,000 to one million bites per year, accounting for one percent of all emergency room visits nationwide. Ten percent of these injuries require suturing, one to two percent require hospitalization, and approximately one-third of dog bite injuries cause lost time from work or school. The United States Postal Service spends more than $250,000 annually just for prevention and treatment of dog bite injuries involving letter carriers! Still think that adorable pooch is harmless? Read on.

Children are especially vulnerable

The most common victims of dog bites are infants and children under the age of 10. The face is the most common site of injury, accounting for more than 40,000 facial lacerations annually in this age group. One-half of all bitten children will retain a lifelong scar as a result. Although larger breed dogs cause more severe bites, all breeds are capable of inflicting bites that require treatment. In fact, smaller dogs often are more apt to bite, as they are more likely to feel "threatened."

Popular culture and sensational news stories would lead us to believe that most dog bite injuries are caused by "packs" of strays or "pit bulls" preying upon unsuspecting children; this, however, is not the usual case. Ninety percent of injured children were bitten at home — one-half of them by their own dog! Eighty-five percent were bitten by a dog with no previous biting history. Most of these bites could have been prevented through common sense and a better understanding of "dog psychology."

Tips for preventing dog bite injuries

1. Realize that any dog can bite if provoked. Dogs can be very territorial, and children often don't realize that they may be "invading the dog's turf." Even a gentle dog may tire of incessant roughhousing — his bite is his way of saying, "Hey, that's enough!"

2. Practice responsible pet ownership. A trained dog is less likely to bite, and more likely to respond to scolding when a possibly dangerous situation occurs. In addition, dogs on leashes and dogs

that are tied up or penned are less likely to interact with neighbors or their children.

3. Don't allow your pet to have unsupervised access to infants. Dogs have feelings, too, and they may regard the new baby as a "threat." A jealous dog is just as likely as a jealous three-year-old to "smack the baby" while no one is looking.

4. Keep children (especially toddlers) away from the dog's feeding place. A high percentage of children get bitten because they attempted to pet or play with the dog while the dog was eating. In the wild, dogs must eat when they can, and their instincts dictate that any encroachment while eating is an attempt to steal food.

5. Teach children to pet the dog properly. Use a stuffed dog to demonstrate "good" petting as opposed to "bad" petting (grabbing ears, pulling tails, etc.)

6. Teach children the proper way to encounter dogs. Hold the hand palm up when meeting a friend's dog (a downward palm may be misconstrued as an attempt to hit) and allow the dog to approach and sniff, rather than approaching the dog. From the dog's point of view, squatting down (as opposed to bending at the waist) is viewed as less threatening. Children should be aware that dogs also display "body language," and dropped ears, bared teeth, and low growls should be taken seriously — when dogs say "Back off," they mean it.

7. Teach children what kind of play is allowable with dogs. Games like "dress-up" or standing the dog on his back legs make it easy for a child to accidentally twist the dog's leg — which may lead to a retaliatory bite. Running and wrestling games can cause large dogs to "forget" they outweigh their little friends by as much as 40 pounds, and send children sprawling like bowling pins. Herding dogs (such as collies and shelties) incorporate nipping into running play, as this is part of their herding instinct. Teasing a dog is never acceptable. Adults are slow to heed this piece of advice also — and occasionally end up in the emergency room for treatment after sheepishly admitting they were bitten while tormenting their own dogs!

8. Never directly break up fighting dogs. Throwing water on them or turning the hose on them usually breaks up the fight from a safe distance.

Treatment

Dog bites that break the skin should be treated by a physician. Although rabies is always a real concern, the risk of acquiring rabies is small compared to the risk of infection by Pasteurella or Staphylococcus aureus bacteria. Approximately five-15% of dog bites become infected, and can lead to complications such as cellulitis or osteomyelitis. Immunized dogs are just as likely to cause infected bites as non-immunized ones. Infection can be best prevented by allowing the physician to numb the wound with a local anesthetic and scrubbing vigorously with a disinfectant such as Betadine.

Thousands of dogs are destroyed each year because of biting incidents, and thousands of individuals are injured or permanently scarred because of dog bites. Education and proper pet ownership can prevent all of these unfortunate, unnecessary consequences, making dog ownership more enjoyable for everyone. ■

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VASOTEC is available in 2.5-mg, 5-mg, 10-mg, and 20-mg tablet strengths.

Contraindications: VASOTEC* (Enalapril Maleate, MSD) is contraindicated in patients who are hypersensitive to this product and in patients with a history of angioedema related to previous treatment with an ACE inhibitor

Warnings: ***Angioedema:*** Angioedema of the face, extremities, lips, tongue, glottis, and/or larynx has been reported in patients treated with ACE inhibitors, including VASOTEC In such cases, VASOTEC should be promptly discontinued and appropriate therapy and monitoring should be provided until complete and sustained resolution of signs and symptoms has occurred In instances where swelling has been confined to the face and lips, the condition has generally resolved without treatment, although antihistamines have been useful in relieving symptoms Angioedema associated with laryngeal edema may be fatal **Where there is involvement of the tongue, glottis, or larynx likely to cause airway obstruction, appropriate therapy, e.g., subcutaneous epinephrine solution 1:1000 (0.3 mL to 0.5 mL) and/or measures necessary to ensure a patent airway, should be promptly provided.** (See ADVERSE REACTIONS)

Hypotension Excessive hypotension is rare in uncomplicated hypertensive patients treated with VASOTEC alone Patients with heart failure given VASOTEC commonly have some reduction in blood pressure, especially with the first dose, but discontinuation of therapy for continuing symptomatic hypotension usually is not necessary when dosing instructions are followed, caution should be observed when initiating therapy (See DOSAGE AND ADMINISTRATION) Patients at risk for excessive hypotension, sometimes associated with oliguria and/or progressive azotemia and rarely with acute renal failure and/or death, include those with the following conditions or characteristics heart failure, hyponatremia, high-dose diuretic therapy, recent intensive diuresis or increase in diuretic dose, renal dialysis, or severe volume and/or salt depletion of any etiology It may be advisable to eliminate the diuretic (except in patients with heart failure), reduce the diuretic dose, or increase salt intake cautiously before initiating therapy with VASOTEC in patients at risk for excessive hypotension who are able to tolerate such adjustments (See PRECAUTIONS, *Drug Interactions* and ADVERSE REACTIONS) In patients at risk for excessive hypotension, therapy should be started under very close medical supervision and such patients should be followed closely for the first two weeks of treatment and whenever the dose of enalapril and/or diuretic is increased Similar considerations may apply to patients with ischemic heart disease or cardiovascular disease in whom an excessive fall in blood pressure could result in a myocardial infarction or cerebrovascular accident

If excessive hypotension occurs, the patient should be placed in the supine position and, if necessary, receive an intravenous infusion of normal saline A transient hypotensive response is not a contraindication to further doses of VASOTEC, which usually can be given without difficulty once the blood pressure has stabilized If symptomatic hypotension develops, a dose reduction or discontinuation of VASOTEC or concomitant diuretic may be necessary

Neutropenia/Agranulocytosis Another ACE inhibitor, captopril, has been shown to cause agranulocytosis and bone marrow depression, rarely in uncomplicated patients but more frequently in patients with renal impairment, especially if they also have a collagen vascular disease Available data from clinical trials of enalapril are insufficient to show that enalapril does not cause agranulocytosis at similar rates Foreign marketing experience has revealed several cases of neutropenia or agranulocytosis in which a causal relationship to enalapril cannot be excluded Periodic monitoring of white blood cell counts in patients with collagen vascular disease and renal disease should be considered

Fetal/Neonatal Morbidity and Mortality ACE inhibitors, including VASOTEC, can cause fetal and neonatal morbidity and mortality when administered to pregnant women

Enalapril crosses the human placenta When ACE inhibitors have been used during the second and third trimesters of pregnancy, there have been reports of hypotension, renal failure, skull hypoplasia, and/or death in the newborn. Oligohydramnios has also been reported, presumably representing decreased renal function in the fetus, limb contractures, craniofacial deformities, hypoplastic lung development and intrauterine growth retardation have been reported in association with oligohydramnios Patients who do require ACE inhibitors during the second and third trimesters of pregnancy should be apprised of the potential hazards to the fetus, and frequent ultrasound examinations should be performed to look for oligohydramnios If oligohydramnios is observed, VASOTEC should be discontinued unless it is considered life-saving for the mother

Other potential risks to the fetus/neonate exposed to ACE inhibitors include intrauterine growth retardation, prematurity patent ductus arteriosus, fetal death has also been reported It is not clear, however, whether these reported events are related to ACE inhibition or the underlying maternal disease It is not known whether exposure limited to the first trimester can adversely affect fetal outcome

Infants exposed *in utero* to ACE inhibitors should be closely observed for hypotension, oliguria, and hyperkalemia If oliguria occurs, attention should be directed toward support of blood pressure and renal perfusion

Enalapril has been removed from the neonatal circulation by peritoneal dialysis and theoretically may be removed by exchange transfusion, although there is no experience with the latter procedure

There was no fetotoxicity or teratogenicity in rats treated with up to 200 mg/kg/day of enalapril (333 times the maximum human dose) Fetotoxicity, expressed as a decrease in average fetal weight, occurred in rats given 1200 mg/kg/day of enalapril, but did not occur when these animals were supplemented with saline Enalapril was not teratogenic in rabbits However, maternal and fetal toxicity occurred in some rabbits at doses of 1 mg/kg/day or more Saline supplementation prevented the maternal and fetal toxicity seen at doses of 3 and 10 mg/kg/day but not at 30 mg/kg/day (50 times the maximum human dose)

If VASOTEC is used during pregnancy or if the patient becomes pregnant while taking VASOTEC, the patient should be apprised of the potential hazards to the fetus

Precautions: *General Impaired Renal Function* As a consequence of inhibiting the renin-angiotensin-aldosterone system, changes in renal function may be anticipated in susceptible individuals In patients with severe heart failure whose renal function may depend on the activity of the renin-angiotensin-aldosterone system, treatment with ACE inhibitors, including VASOTEC, may be associated with oliguria and/or progressive azotemia and rarely with acute renal failure and/or death

In clinical studies in hypertensive patients with unilateral or bilateral renal artery stenosis, increases in blood urea nitrogen and serum creatinine were observed in 20% of patients These increases were almost always reversible upon discontinuation of enalapril and/or diuretic therapy In such patients, renal function should be monitored during the first few weeks of therapy

Some patients with hypertension or heart failure with no apparent preexisting renal vascular disease have developed increases in blood urea and serum creatinine, usually minor and transient, especially when VASOTEC has been given concomitantly with a diuretic This is more likely to occur in patients with preexisting renal impairment Dosage reduction and/or discontinuation of the diuretic and/or VASOTEC may be required

Evaluation of patients with hypertension or heart failure should always include assessment of renal function. (See DOSAGE AND ADMINISTRATION)

Hyperkalemia Elevated serum potassium (> 5 7 mEq/L) was observed in approximately 1% of hypertensive patients in clinical trials In most cases these were isolated values which resolved despite continued therapy Hyperkalemia was a cause of discontinuation of therapy in 0 28% of hypertensive patients In clinical trials in heart failure, hyperkalemia was observed in 3 8% of patients, but was not a cause for discontinuation

Risk factors for the development of hyperkalemia include renal insufficiency, diabetes mellitus, and the concomitant use of potassium-sparing diuretics, potassium supplements, and/or potassium-containing salt substitutes, which should be used cautiously, if at all, with VASOTEC (See *Drug Interactions*)

Cough Cough has been reported with the use of ACE inhibitors Characteristically, the cough is nonproductive, persistent and resolves after discontinuation of therapy ACE inhibitor-induced cough should be considered as part of the differential diagnosis of cough

Surgery/Anesthesia In patients undergoing major surgery or during anesthesia with agents that produce hypotension, enalapril may block angiotensin II formation secondary to compensatory renin release If hypotension occurs and is considered to be due to this mechanism, it can be corrected by volume expansion

Information for Patients Angioedema Angioedema, including laryngeal edema, may occur especially following the first dose of enalapril Patients should be so advised and told to report immediately any signs or symptoms suggesting angioedema (swelling of face, extremities, eyes, lips, tongue, difficulty in swallowing or breathing) and to take no more drug until they have consulted with the prescribing physician

Hypotension Patients should be cautioned to report lightheadedness, especially during the first few days of therapy If actual syncope occurs, the patients should be told to discontinue the drug until they have consulted with the prescribing physician

All patients should be cautioned that excessive perspiration and dehydration may lead to an excessive fall in blood pressure because of reduction in fluid volume Other causes of volume depletion such as vomiting or diarrhea may also lead to a fall in blood pressure, patients should be advised to consult with the physician

Hyperkalemia Patients should be told not to use salt substitutes containing potassium without consulting their physician

Neutropenia Patients should be told to report promptly any indication of infection (e g , sore throat, fever) which may be a sign of neutropenia

NOTE As with many other drugs, certain advice to patients being treated with enalapril is warranted This information is intended to aid in the safe and effective use of this medication It is not a disclosure of all possible adverse or intended effects

Drug Interactions Hypotension Patients on Diuretic Therapy Patients on diuretics and especially those in whom diuretic therapy was recently instituted may occasionally experience an excessive reduction of blood pressure after initiation of therapy with enalapril The possibility of hypotensive effects with enalapril can be minimized by either discontinuing the diuretic or increasing the salt intake prior to initiation of treatment with enalapril If it is necessary to continue the diuretic, provide close medical supervision after the initial dose for at least two hours and until blood pressure has stabilized for at least an additional hour (See WARNINGS and DOSAGE AND ADMINISTRATION)

Agents Causing Renin Release The antihypertensive effect of VASOTEC® (Enalapril Maleate, MSD) is augmented by antihypertensive agents that cause renin release (e g , diuretics)

Other Cardiovascular Agents VASOTEC has been used concomitantly with beta-adrenergic-blocking agents, methyldopa, nitrates, calcium-blocking agents, hydralazine, prazosin, and digoxin without evidence of clinically significant adverse interactions

Agents Increasing Serum Potassium. VASOTEC attenuates potassium loss caused by thiazide-type diuretics Potassium-sparing diuretics (e g , spironolactone, triamterene, or amiloride), potassium supplements, or potassium-containing salt substitutes may lead to significant increases in serum potassium Therefore, if concomitant use of these agents is indicated because of demonstrated hypokalemia, they should be used with caution and with frequent monitoring of serum potassium Potassium-sparing agents should generally not be used in patients with heart failure receiving VASOTEC

Lithium Lithium toxicity has been reported in patients receiving lithium concomitantly with drugs which cause elimination of sodium, including ACE inhibitors A few cases of lithium toxicity have been reported in patients receiving concomitant VASOTEC and lithium and were reversible upon discontinuation of both drugs It is recommended that serum lithium levels be monitored frequently if enalapril is administered concomitantly with lithium.

Pregnancy Pregnancy Category D See WARNINGS, *Fetal/Neonatal Morbidity and Mortality*

Nursing Mothers Enalapril and enalaprilat are detected in human milk in trace amounts Caution should be exercised when VASOTEC is given to a nursing mother

Pediatric Use Safety and effectiveness in children have not been established

Adverse Reactions: VASOTEC has been evaluated for safety in more than 10,000 patients, including over 1000 patients treated for one year or more VASOTEC has been found to be generally well tolerated in controlled clinical trials involving 2987 patients

HYPERTENSION The most frequent clinical adverse experiences in controlled trials were headache (5 2%), dizziness (4 3%), and fatigue (3%)

Other adverse experiences occurring in greater than 1% of patients treated with VASOTEC in controlled clinical trials were diarrhea (1 4%), nausea (1 4%), rash (1 4%), cough (1 3%), orthostatic effects (1 2%), and asthenia (1 1%)

HEART FAILURE The most frequent clinical adverse experiences in both controlled and uncontrolled trials were dizziness (7 9%), hypotension (6 7%), orthostatic effects (2 2%), syncope (2 2%), cough (2 2%), chest pain (2 1%), and diarrhea (2 1%)

Other adverse experiences occurring in greater than 1% of patients treated with VASOTEC in both controlled and uncontrolled clinical trials were fatigue (1 8%), headache (1 8%), abdominal pain (1 6%), asthenia (1 6%), orthostatic hypotension (1 6%), vertigo (1 6%), angina pectoris (1 5%), nausea (1 3%), vomiting (1 3%), bronchitis (1 3%), dyspnea (1 3%), urinary tract infection (1 3%), rash (1.3%), and myocardial infarction (1 2%)

Other serious clinical adverse experiences occurring since the drug was marketed or adverse experiences occurring in 0 5% to 1% of patients with hypertension or heart failure in clinical trials in order of decreasing severity within each category

Cardiovascular Cardiac arrest, myocardial infarction or cerebrovascular accident, possibly secondary to excessive hypotension in high-risk patients (see WARNINGS, *Hypotension*), pulmonary embolism and infarction, pulmonary edema, rhythm disturbances including atrial tachycardia and bradycardia, atrial fibrillation, palpitation

Digestive Ileus, pancreatitis, hepatitis (hepatocellular [proven on rechallenge] or cholestatic jaundice), melena, anorexia, dyspepsia, constipation, glossitis, stomatitis, dry mouth

Musculoskeletal Muscle cramps

Nervous/Psychiatric Depression, confusion, ataxia, somnolence, insomnia, nervousness, paresthesia

Respiratory Bronchospasm, rhinorrhea, sore throat and hoarseness, asthma, upper respiratory infection

Skin Exfoliative dermatitis, toxic epidermal necrolysis, Stevens-Johnson syndrome, herpes zoster, erythema multiforme, urticaria, pruritus, alopecia, flushing, diaphoresis

Special Senses Blurred vision, taste alteration, anosmia, tinnitus, conjunctivitis, dry eyes, tearing

Urogenital Renal failure, oliguria, renal dysfunction (see PRECAUTIONS and DOSAGE AND ADMINISTRATION), impotence

A symptom complex has been reported which may include a positive ANA, an elevated erythrocyte sedimentation rate, arthralgia/arthritis, myalgia, fever, serositis, vasculitis, leukocytosis, eosinophilia, photosensitivity, rash, and other dermatologic manifestations

Angioedema Angioedema has been reported in patients receiving VASOTEC (0 2%) Angioedema associated with laryngeal edema may be fatal If angioedema of the face, extremities, lips, tongue, glottis, and/or larynx occurs, treatment with VASOTEC should be discontinued and appropriate therapy instituted immediately (See WARNINGS)

Hypotension In the hypertensive patients, hypotension occurred in 0 9% and syncope occurred in 0 5% of patients following the initial dose or during extended therapy Hypotension or syncope was a cause for discontinuation of therapy in 0 1% of hypertensive patients In heart failure patients, hypotension occurred in 6 7% and syncope occurred in 2 2% of patients Hypotension or syncope was a cause for discontinuation of therapy in 1 9% of patients with heart failure (See WARNINGS)

Fetal/Neonatal Morbidity and Mortality In infants exposed *in utero* to ACE inhibitors the following adverse experiences have been reported Fetal and neonatal death, renal failure, hypoplastic lung development, hypotension, hyperkalemia, skull hypoplasia, limb contractures, craniofacial deformities, intrauterine growth retardation, prematurity and patent ductus arteriosus (See WARNINGS, *Fetal/Neonatal Morbidity and Mortality*)

Clinical Laboratory Test Findings Serum Electrolytes Hyperkalemia (see PRECAUTIONS), hyponatremia

Creatinine, Blood Urea Nitrogen In controlled clinical trials, minor increases in blood urea nitrogen and serum creatinine, reversible upon discontinuation of therapy, were observed in about 0 2% of patients with essential hypertension treated with VASOTEC alone Increases are more likely to occur in patients receiving concomitant diuretics or in patients with renal artery stenosis (See PRECAUTIONS) In patients with heart failure who were also receiving diuretics with or without digitalis, increases in blood urea nitrogen or serum creatinine, usually reversible upon discontinuation of VASOTEC and/or other concomitant diuretic therapy, were observed in about 11% of patients Increases in blood urea nitrogen or creatinine were a cause for discontinuation in 1 2% of patients

Hemoglobin and Hematocrit Small decreases in hemoglobin and hematocrit (mean decreases of approximately 0 3 g% and 1 0 vol%, respectively) occur frequently in either hypertension or heart failure patients treated with VASOTEC but are rarely of clinical importance unless another cause of anemia coexists In clinical trials, less than 0 1% of patients discontinued therapy due to anemia

Other (Causal Relationship Unknown) In marketing experience, rare cases of neutropenia, thrombocytopenia, and bone marrow depression have been reported A few cases of hemolysis have been reported in patients with G6PD deficiency

Liver Function Tests Elevations of liver enzymes and/or serum bilirubin have occurred

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SPECIAL ARTICLE

Physician Peer Review: Have We Gone Far Enough Or Too Far?

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The authors discuss the long history of physician peer review and offer insight on the process, while presenting factors that have lead to increased physician non-peer review. The question at hand — have we gone far enough . . . or too far?

Recently *USA Today* carried a cover story, "Who is minding the doctors?"[1] The story announced the release of a publication by the Public Citizen Health Research Group, Washington, D.C., disclosing a list of 6,892 physicians who had been officially disciplined by their respective state medical boards. The report, the size of a New York City telephone book, is available to individuals for $30, but to businesses, doctors, and lawyers for $100. Its official title is "6892 Questionable Doctors Disciplined by States of the Federal Government." Not all state medical boards participated in the project, and the publication has been criticized as being biased and inaccurate. One specific criticism is that many of the physicians on the list have successfully defended themselves against the charges in subsequent appeals not reported by the publication. We note that physicians are coming under increased scrutiny by consumer groups and the public at large.

Policing of physicians is primarily done by "Peer Review Committees." For years, the medical profession performed its own peer review. As a completely autonomous profession, no outside input was sought or even tolerated.[2] Any disciplinary actions were kept confidential. Revocations of medical licenses or hospital privileges were rare. Only the most egregious misconduct, such as intentional tortious actions by the physician, led to disciplinary action. However, within the past two decades, physician disciplinary actions by state medical boards have soared. From 1982 to 1987, there has been a 170% increase in sanctions against physicians.[1] Three factors have led to this increase: the consumer advocacy movement; the influence of third-party payers, especially the U.S. government; and the explosion in medicolegal litigation.

The response by the health care industry to this perceived crisis in physicians' incompetence has been reactionary. The number of physician peer review committees has increased geometrically. However, the issue of whether we have gone too far or not far enough in "minding the doctors" has gone unresolved.

What is Physician Peer Review?

Physician peer review is a "self-analysis" to ensure the quality of medical services provided and to identify and sanction incompetent physicians.[3] This self-analysis was originally performed solely by the peers (other physicians) of the physician under scrutiny. Today, however, peer review means "any review of professional medical activity, whether directly or indirectly related to quality and whether performed by the true 'peers' or by other external parties."[3]

There are medical society peer review committees, hospital medical staff peer review committees, peer review committees within professional organizations, Health Maintenance Organizations, Preferred Provider Organizations, Independent Provider Associations, and a host of others. The basic premise of all these groups is that they will ensure that the medical care rendered is of standard quality. In order for any of these peer review committees to function effectively, confidentiality is mandatory.

Confidentiality is necessary in all phases of the peer review proceeding — reporting, discovery, and resolution. Without confidentiality, there is less incentive to report misconduct of physicians because of possible liability, including suits for defamation. The physicians on the committee would also be less likely to participate in proceedings for the same reason. To bolster the confidentiality aspects of peer review, every state now has statutory provisions giving immunity from civil litigation to parties participating in peer review proceedings.

Physician Peer Review: A Typical State Statute

Missouri has a statute typical of many states. A physician peer review committee is defined in the law as a "committee of health care professionals with the responsibility to evaluate, maintain, or monitor the quality and utilization of health care services or to exercise any combination of such responsibilities."[5] The statute applies to physicians, surgeons, dentists, podiatrists, optometrists, pharmacists, chiropractors and psychologists working within the scope of their practice.

The statute specifies four types of peer review committees:

1) Health care professionals appointed by a state, county or local society of health care providers;

2) Health care professionals appointed by the partners, shareholders, or employed health care professionals of a partnership or professional corporation of health care professionals;

3) Health care professionals appointed by the board of trustees, chief executive officer, or the organized medical staff of a licensed hospital or other health facility operating under constitutional or statutory authority; or

4) Any other organization formed pursuant to state or federal law authorized to exercise the responsibilities of a peer review committee and acting within the scope of such authorization.

Immunity from civil litigation is given as long as members of the committee act in good faith, without malice and reasonably in relationship to the scope of inquiry of the peer review committee. The findings of the committee are privileged (confidential) and therefore not discoverable in a lawsuit except when the committee sues a physician or is sued by a physician protesting an action against his or her staff privileges or license to practice.

Typical Case Report

The best way to describe how a peer review committee works is to look at a typical case. Dr. Smith, one of the busiest surgeons on staff at General Hospital, was reported to the Chief of Staff anonymously by three individuals, presumably employees of the hospital, for failing to care for his patients appropriately post-operatively. In the medical staff bylaws of General Hospital, a procedure is detailed to deal with such a report. General Hospital has a standing peer review committee of the surgery department to investigate complaints. An investigation was undertaken by the committee. The committee did indeed find that Dr. Smith did not adhere to the professional standards of appropriate post-operative care. Several patients were not evaluated on a regular or daily basis. There were two patients who were not evaluated for a stretch of two days post-operatively. However, all the alleged instances occurred with a two-week period. Dr. Smith had never been reported or investigated prior to this time.

Dr. Smith was notified of the Committee's findings and was given reasonable time to prepare himself for a meeting to discuss the findings. He was advised that his personal attorney could attend the meeting, but this was not really necessary. Dr. Smith was given a list of the charts reviewed, but the individuals reporting to the Chief of Staff were not revealed.

Two weeks later the hearing took place. The members of the peer review committee and the Chief of Surgery along with the Chief of Staff were present. The committee presented their findings. Dr. Smith did not contest the evidence but did offer an explanation. Apparently, a member of Dr. Smith's family had been seriously ill during the time period in question, and Dr. Smith had been preoccupied. Since there were no adverse patient outcomes and this was Dr. Smith's first time before the peer review committee, the committee recommended a verbal warning and a probationary period of three months. There was no reduction in hospital privileges. Dr. Smith was advised that the proceedings would be kept strictly confidential.

The preceding scenario occurs almost daily in many large hospitals throughout the country. As it shows, the peer review committee has several functions: fact-finding, evaluation and discipline. This particular peer review committee was a traditional one, composed entirely of physicians. The complaint that triggered the review concerned quality assurance, the primary function of the peer review committee. The investigation was carried out according to previously published bylaws of the hospital medical staff. The physician knew of the bylaws, since each member of the hospital staff was required to read the bylaws upon admission to the staff and annually at renewal. The physician was also personally notified that he was being reviewed and was given adequate time to prepare an answer or defense to the charge. The physician was also advised that his personal attorney could assist him in his preparation.

At the hearing, Dr. Smith was told of the committee's findings and was allowed to reply to the charges. The disciplinary action seemed appropriate. Dr. Smith also had, if he wished, an opportunity to appeal the decision to the medical executive committee. The committee's actions were kept confidential.

The Physician Under Scrutiny

Everyone in health care probably knows a physician who has been named a defendant in a malpractice case. Some of the burden a malpractice defendant must bear includes not only his "marred" reputation but the anxiety of not knowing the ultimate outcome. However unnerved the physician may be, he knows that his practice will continue and that he will still provide a living for his family. But this is not so when the physician becomes the target of a peer review committee. His very livelihood is under attack. The worst possible scenario is revocation of his hospital privileges and possible revocation of his medical license. All he has worked for during the past several decades could go up in a puff of smoke. A highly trained, specialized physician may not be capable of anything but practicing medicine.

The previous scenario may be an exaggeration, but in reality, it could happen. There is a balance between assuring quality medical care and ruining a duly-trained physician for life. Our analysis appears slanted toward physicians, but perhaps an explanation can clarify.

Physicians rely heavily upon the hospital as a place to concentrate their practices. A surgeon, internist or obstetrician could not function without hospital privileges. There is a loose network of health care institutions that checks on physicians applying for privileges. This network will be enhanced when the federal data bank of physician information authorized by "The Health Care Quality Improvement Act of 1986" becomes effective. The data bank will contain information on state medical board disciplinary actions against physicians. The act provides confidentiality except that state medical boards, hospitals, health care entities, and under limited circumstances, plaintiffs' attorneys, may have access to the data. State medical boards, hospitals, and other health care entities must report their adverse actions against physicians to the federal data bank. In some cases, all actions — adverse or otherwise — must be reported.

Once a physician has been entered into the data bank as the subject of an adverse action, his career may be crippled. Subsequent hospital privileges may not be granted and applications for medical licenses or renewals may be rejected. Unscrupulous attorneys may use the data to go on a "fishing expedition."

Protective Measures for Physicians

Before a physician's license or privileges can be reduced, denied, or terminated, due process must be given. The 14th amendment to the U.S.

Constitution states "nor shall any state deprive any person of life, liberty, or property, without due process of law." Hospital privileges and medical licenses are considered property. Due process requires, at the minimum, notice and an opportunity to be heard. Only when there is an overriding interest, such as imminent endangerment of patients by the physician's actions or inactions, will due process be abrogated, but then only temporarily. In some states, due process requires that the physician have a right to be represented by counsel.

Due process also requires that specified bylaws of the medical staff be followed strictly in peer review proceedings. The accused physician also has the right to confront and cross-examine witnesses. Finally, in most states, judicial review is available to the physician against whom the committee takes adverse action.

A recent article in a professional publication gives good advice to physicians whose staff privileges are under scrutiny. "Any action involving a physician's staff privileges is extremely serious. It may result in loss of income and patients, and may injure reputation and stature in the medical community. For these reasons, it is most important to seek legal counsel immediately."[6]

How A Physician Can Respond to Groundless Complaints

Physician peer review committee proceedings are supposed to be confidential. However, in most instances the word gets out, sometimes before the physician under investigation knows of the charges. If the charges are found to be credible after a thorough and appropriate (legal) investigation, the physician can do little to restore his tarnished reputation. However, if the charges are unfounded, the physician may have recourse.

In almost all states, members of the peer review committee must act in good faith and without malice. The investigation may not be performed simply for harassment or for spite by either the individual physicians or the institution. Immunity from civil liability is given to members of a peer review committee who act in good faith and without malice. This immunity, however, is conditional, not absolute. If members of the peer review committee or the institution act in bad faith or with malice, there is basis for tort action, such as defamation or intentional infliction of emotional distress. Damage to a physician's reputation could be great and result in not only compensatory damages but also punitive damages.

Too Far or Not Far Enough?

In summary, physician peer review is necessary to weed out incompetent physicians and to ensure quality medical care. Given the foregoing discussion, we now face the issue of whether physician peer review has gone too far or not far enough.

As in any profession, the quality of services rendered is an important concern. It is difficult to evaluate physicians. What makes a "good" or "average" physician is difficult to define. Medicine is an inexact science, really an art. The process of giving medical care is varied and individualistic. The only real measure of quality is the result, and that is not very precise. For example, if one obstetrician's cesarean section rate is 45% and the hospital average is 22%, is this obstetrician providing low quality or poor care? If the post-operative infection rate of one surgeon is four-fold higher than the average, can we say he or she is not providing quality care?

What About Other Situations?

If only one employee of the hospital reports that a physician made rounds in an intoxicated state and there is no other substantiated report, do we subject the physician to a full peer review investigation? If a physician is unfortunate enough to incur two malpractice suits within six months, should he or she be subjected to peer review and placed on probation? These are difficult issues.

All reports need to be investigated. Strict confidentiality must be maintained, and due process must be accorded the physician. Investigations should be fact-finding, not accusatory. Restriction or revocation of privileges or licenses are serious matters and should not be undertaken unless the grounds are fully documented and proper procedure, i.e. due process, is followed. In the final analysis, peer review is appropriate and will become more widely used, but its success in assuring quality medical care depends upon maintaining proper procedure.

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Retroperitoneal Liposarcoma: A Case Report

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The author presents a case of a common sarcoma of the retroperitoneum and discusses the effectiveness of various treatments and therapies.

Soft tissue sarcoma accounts for only 0.7% of all cancers, and retroperitoneal sarcoma comprises only 15% of all sarcomas.[1] These tumors can be confused with other masses in the retroperitoneum and the pelvis.[2] Sarcoma can occur anywhere in the body. The location of the tumor has a major influence on treatment options available.

Case Report

An 83-year-old white woman had a palpable mass in the right upper quadrant of her abdomen. She had noticed the mass several weeks previously. She had been diagnosed with chronic lymphocytic leukemia, but was not receiving treatment for that condition.

The patient underwent a computed tomography (CT) scan of the abdomen, which revealed a complex mass arising from the lower pole of the right kidney. An angiogram showed a hypovascular lesion arising in the retroperitoneum, pushing the lower pole of the kidney superiorly (Fig 1).

She then underwent a laparotomy, and a large, encapsulated retroperitoneal tumor was removed. The tumor was non-invasive. The patient's postoperative course was uneventful. The pathology report revealed a moderate to poorly differentiated liposarcoma (Fig 2).

The patient received radiation therapy to eradicate the tumor bed. No chemotherapy was given, in view of her already compromised immune system. At her last visit, the patient was in excellent health with no evidence of recurrent tumor.

Discussion

Liposarcoma of the retroperitoneum is one of the common sarcomas in adults of all ages. It is rarely seen in children.[3]

The tumor usually appears as a palpable mass,[1] as in our patient. Some liposarcomas may present as spermatic cord tumors.[4] Computed tomography (CT) scan and angiography help confirm the diagnosis. Most liposarcomas display several histological features and can be grouped into the

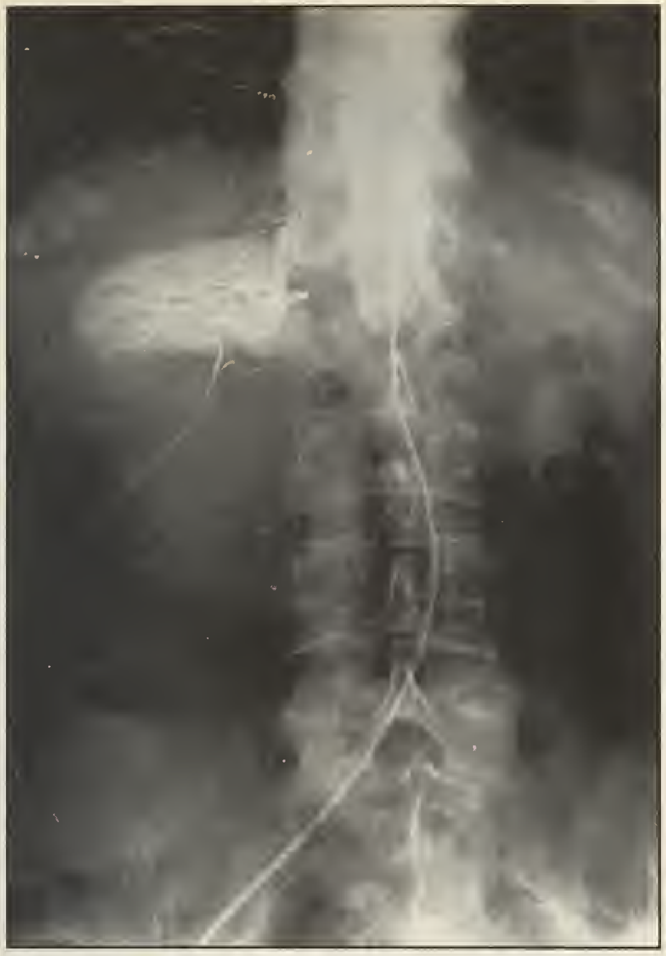

Fig. 1. Angiogram showing a large hypovascular mass, thought most likely to represent a liposarcoma of the retroperitoneum.

Fig. 2. Histology shows moderate to poorly differentiated liposarcoma.

following types: myxoid, well-differentiated, pleomorphic, round cell, and mixed.[5] If the tumor shows evidence of necrosis, the prognosis is not good.[1,5]

Total removal of a sarcoma is the best means of disease control. Many sarcomas have a pseudocapsule; therefore, tissue surrounding the capsule should be resected. The role of radiation therapy and chemotherapy in the management of retroperitoneal sarcoma is not established.

In summary, liposarcoma is the most common retroperitoneal sarcoma in adults. Of all patients with sarcomas, those with liposarcoma survive the longest. The five-year survival rates are highest for liposarcoma (70%), malignant fibrous histiocytoma (33%) and leiomyosarcoma (13%).[1]

The primary treatment failure is local recurrence. This is usually detected within three years of complete resection. Complete surgical excision of the tumor with adequate tumor-free margins is the most effective initial treatment and provides the best chance of a cure.[1]

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Congenital Melanocytic Nevi: Update 1990

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The risks posed by congenital melanocytic nevi and best methods for their treatment have posed controversial questions. Here the authors review the most recent information and latest therapies for congenital nevi.

Patients with congenital melanocytic nevi (CN) are a perplexing management challenge. How can one make rational therapeutic decisions with grossly inadequate data in the face of strongly held and frequently contradictory viewpoints? We would like to present our analysis of the available data concerning CN and suggest our treatment recommendations.

Definition of Congenital Nevi

Congenital nevi (CN) have traditionally been defined as nevocellular aggregates present at birth or shortly thereafter. Unfortunately, no consensus exists in the sub-classification of CN.[1] Giant congenital nevi (GCN), variously called "garment-type," "pelt," "bathing trunk," or "hairy" nevi are unevenly pigmented, contain terminal hairs, have an uneven verrucose surface, and occupy large portions of the body surface. How large must a CN be to qualify as a GCN? The following criteria have been proposed:

- Lesions greater than two percent of the body surface;[2]
- Lesions twice as large as the patient's palm;[3]
- Lesions greater than 930 cm^2 in adults;[4]
- Lesions greater than 10 cm or 20 cm in greatest diameter;[5,6] and
- Lesions that cannot be excised primarily.[7]

Alternatively, CN measuring less than 1.5 cm in greatest diameter have been considered small congenital nevi (SCN).[8] The NIH Consensus Conference suggested the following definitions for congenital nevi: small (< 1.5 cm in diameter); medium (1.5 to 20 cm in diameter); and large (> 20 cm in diameter) (Table 1).[9]

Incidence of Congenital Nevi

Walton and Alper found one percent of all newborns to have CN;[10] the vast majority of these lesions were small congenital nevi (SCN).[11] The incidence of GCN, taking into account the variations of definition, has been estimated at 0.005%.[12,13]

Can Congenital Nevi be Defined by Light Microscopy?

Mark et al suggest that CN have a distinctive appearance on histology,[6] stating that CN can be differentiated from acquired nevi (AN) by the following characteristics:

1. Nevus cells are present in the deep dermis and sub-cutis;
2. Nevus cells sit within the dermis between collagen bundles or in an "Indian file" pattern; and
3. Nevus cells infiltrate the walls of vessels, nerves, and adnexa of the deep dermis.

Unfortunately, histology may not be a sensi-

Table 1
NIH Consensus Conference Criteria
For Congenital Nevi[9]

Small	< 1.5 cm diameter
Medium	1.5 to 20 cm diameter
Giant	> 20 cm diameter

tive marker for CN biopsied at birth. Walton found only two of 11 nevocellular nevi in neonates studied in the first 72 hours of life to have features predictive of CN.[10] Additionally, Rhodes found that 36% of CN lacked these histologic features and that 10% of AN demonstrated the same features.[14] Everett's review showed that these features were a function of size of the nevus, not age of onset.[15] Our experience supports these authors' findings, and we cannot consider histologic examination a sensitive or specific method for identifying CN. This point suggests there are critical flaws in most, if not all, of the available data associating melanoma with various congenital nevi.

Recently, immunohistologic markers have been used in attempts to distinguish CN from AN. Panels of monoclonal antibodies against melanoma antigens have been tested, and show that CN stain somewhat differently than AN, although considerable overlap occurs.[16] Some large CN have been found to be aneuploid, suggesting potential malignant degeneration.[17]

What is the Risk of Melanoma in Children?

The incidence of malignant melanoma (MM) has been rising worldwide for at least 20 years; estimates suggest the true incidence of melanoma in the United States has increased 600% in the last 50 years.[18] Although two percent of malignant melanomas occur in patients younger than 20 years of age, only 0.3%-0.4% of cases occur in prepubescent children.[19] The expected incidence in the first decade of life is 0.8 cases/million and in the second decade 6.3 cases/million.[19-21,28]

It should be noted that only one third of all melanomas arise in any sort of nevus, including congenital nevi, acquired nevi, and dysplastic nevi. That is, two thirds of melanomas develop in "normal" skin.[22]

The prognosis for children, as adults, with MM correlates with depth of invasion. Early diagnosis remains essential; the criteria for selecting pigmented lesions for histologic evaluation are identical to those used widely for adults. These have become popularized as the "ABCD Rules" — asymmetry, ill-defined or irregular border, dark or variegate color, and diameter greater than 6 mm. Risk factors for development of (MM) in children include large number of acquired nevi, sun exposure, dysplastic nevi or xeroderma pigmentosum, and GCN.[23]

In a review of cases of metastatic malignant melanoma in pre-pubertal children, Trozak found only nine of 44 cases had an associated nevocellular nevus; only two of nine were CN.[20] Both CN were classed in the giant category) A recent review of malignant melanoma in patients younger than 20 years of age cited that 80% of melanomas had no identifiable predisposing conditions.[24]

What is the Risk that Congenital Nevi are Precursors of Malignant Melanoma?

When analyzing the association of CN and melanoma, distinctions must be based on lesion size. The link between GCN and malignant melanoma seems firm; however, exact risk data of a patient developing melanoma in a GCN vary widely ranging from 8.5% to 14% lifetime risk (Table 2).[2,3,7,25]

Authors disagree about the relative risk of malignant melanoma developing in small congenital nevi (SCN).[26] Rhodes found SCN in 8.1% of 234 melanoma specimens; he has calculated that a patient with an SCN has a relative risk of developing melanoma of 21 times that of the general population.[27] Using this formula, the overall cumulative risk of developing melanoma would be 2.6%-4.9% for patients with a SCN who live to 60 years of age. Specific risks must be calculated and understood carefully. While we have poor prevalence data about CN and AN in various populations, Dr. Al Kopf at New York University has instituted a nationwide tumor registry for these disorders. Prospective studies of long term risks for SCN have only recently begun; results and conclusions are many years away, but the retrospective studies suggest important clinical differences in small and giant congenital nevi.

The greatest risk for malignant degeneration of GCN exists in the first decade of life.[28] Kaplan suggests 60% of all melanomas that arise in GCN occur in the first decade.[25] In contrast, CN less than 10 cm in diameter have a maximum risk of malignant degeneration until after puberty.[29]

How Should We Deal With Congenital Nevi?

Congenital Nevi should be divided into three groups for evaluation and management.

●**Small Congenital Nevi,** i.e. CN less than 1.5 cm in maximal diameter:
1. The most common CN;
2. Low risk of malignant degeneration but a greater risk of melanoma than the population at large;
3. Risk of degeneration very low until puberty; and
4. Needs careful yearly follow-up.

The principal question concerns the most cost-effective method for follow-up. Simple excision and closure may be quite economical compared with lifelong follow-up visits.

●**Giant Congenital Nevi,** i.e. those with maximal diameter of 20 cm or two percent body surface:
1. Least common CN;
2. High risk of malignant degeneration;
3. Risk of malignant degeneration high in first years of life; and
4. Needs removal at earliest "safe" moment.

The principal question in GCN is how quickly the entire lesion may be removed. Additionally, soft tissue and leptomeningeal CNS melanomatosis are important risks.

●**Medium Congenital Nevi,** i.e those CN from 1.5 cm to 20 cm in maximal diameter:
1. Risk of malignant degeneration is related to the volume of melanocytes;
2. MCNs less than 10 cm have a low risk of degeneration prior to puberty; and
3. MCNs greater than 10 cm act more like GCN and should be removed during the first decade of life.

The principal question with MCN is finding the best time to remove the nevus.

Giant congenital nevi clearly merit removal but are frequently the most difficult to treat effectively.[30,31] Recent advances in tissue expansion have assisted in the treatment of large CN.[32,33] A temporary expander is placed in the subcutaneous space, and the gradual instillation of saline greatly increases the skin available for reconstruction. Although time-consuming and somewhat tedious, tissue expansion has become the primary mode for treating CN on the head and neck. Tissue expansion, in conjunction with the development of autologous skin grafts, permits acceptable cosmetic reconstruction for patients with large, disfiguring CN. Dermabrasion is clearly contraindicated in the medical treatment of CN because of the incomplete removal of melanocytes.[34]

Table 2
Risk of Developing a Cutaneous Melanoma in A Giant Congenital Nevus

Author	Year Published	Lifetime Risk
Kaplan[26]	1974	14%
Lorentzen[3]	1977	4.6%
Rhodes[8]	1981	6.3%
Quaba[2]	1986	8.5%*

** Calculated for first 15 years of life.*

Conclusion

In conclusion, congenital melanocytic nevi are relatively common lesions that have been the center of extensive controversy. Giant CN are a cosmetic burden and are definitely potential precursors of melanoma. These lesions are the most important but the most difficult to excise. Small congenital nevi have been implicated as precursor lesions of melanoma on a retrospective histologic basis, but recent data show that CN are not histologically distinguishable from AN. Hence, we must manage our patients using the best available data carefully and prudently. Careful clinical follow-up is a minimum for these patients, and a good argument may be made for excising even small lesions. Ongoing prospective studies will eventually provide more information about these important lesions.

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April

4 **In Vivo Magnetic Resonance Spectroscopy IV** — Location: The Ritz-Carlton, St. Louis, MO. Contact: Radiology Postgraduate Education, Room C-324, University of California School of Medicine, San Francisco, CA 94143. 415/476-5731.

4 - 5 **Critical Care Update** — Location: Holiday Inn Executive Center, Columbia, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

6 **Hypercholesterolemia: Practical Aspects to Patient Management** — Location: Hyatt Regency, Union Station, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

8 **Leroy Sante Lecture** — Location: St. Louis University, St. Louis, MO. Contact: R. Gilbert Jost, M.D., Chief of Diagnostic Radiology, Mallinckrodt Institute of Radiology, 510 S. Kingshighway, St. Louis, MO 63110. 314/362-7130.

10 - 13 **Treatment of Surgical Spine Disease** — Location: The Ritz-Carlton Hotel, St. Louis, MO. Contact: Cathy Caruso, CME Office, Washington University School of Medicine, 660 S. Euclid, Box 8063, St. Louis, MO 63110. 1-800-325-9862 or 314/362-6893.

11 - 12 **23rd Annual Matt Weiss OB/GYN Symposium** — Location: Breckinridge Frontenac Hotel, St. Louis, MO. Contact: Judith O'Guin, St. John's Mercy Medical Center, 615 S. New Ballas Road, St. Louis, MO 63141. 314/569-6290.

12 - 13 **The 6th Dr. Robert K. Match Distinguished Scholar Program: Controversies In the Management of Breast Cancer** — Location: The Waldorf-Astoria, New York, N.Y. Contact: Ann J. Boehme, CMP, Associate Director of Continuing Education, Long Island Jewish Medical Center, New Hyde Park, NY 11042. 718/470-8650, or FAX: 516/352-4801.

12 - 14 **Annual Geriatric Psychiatry Conference: Recognition and Treatment of Problem Behaviors in Long Term Care** — Location: Tan-Tar-A Resort, Osage Beach, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63014. 1-800-553-2712.

13 **Electro Compulsive Therapy** — Location: Hyatt Regency-Union Station, St. Louis, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

14 - 15 **Advanced Cardiac Life Support Provider Course** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University Medical Center, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104-1083. 1-800-533-2712.

17 - 19 **Seventh Non-invasive Diagnosis of Vascular Disease Symposium** — Location: Henry VIII Hotel and Conference Center, St. Louis, MO. Contact: Judith O'Guin, St. John's Mercy Medical Center, 615 S. New Ballas Road, St. Louis, MO 63141.

18 - 21 **Advanced Microsurgery of the Lumbar & Cervical Spine** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

22 - May 3 **Institute For Clinical Health Care Ethics** — Location: St. Louis University, Margaret McCormick Doisy Learning Resources Center, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-533-2712.

25 - 26 **18th Annual Obstetrics and Gynecology Symposium** — Location: Washington University Medical Center, St. Louis, MO. Contact: Cathy Caruso, CME Office, Washington University School of Medicine, 660 S. Euclid, Box 8063, St. Louis, MO 63110.

27 **Update in Gastroenterology & Hepatology For Primary Care Physicians** — Location: Hyatt Regioncy at Union Station, St. Louis, MO. Contact: St. Louis University School of Medicine, Continuing Medical Education, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

30 - May 2 **Molecular Basis of Bone Cell Physiology: Transcellular Signaling** — Location: The Sheraton West Port Inn, St. Louis, MO. Contact: Cathy Caruso, CME Office, Washington University School of Medicine, 660 S. Euclid, Box 8063, St. Louis, MO 63110. 1-800-325-9862 or 314/362-6893.

May

1 **Updates in Diabetes** — Location: St. John's Mercy Medical Center, von Gontard Conference Center, St. Louis, MO. Contact: Judith L. O'Guin, St. John's Mercy Medical Center, 615 S. New Ballas Rd., St. Louis, MO 63141. 314/569-6930.

1 - 3 **Protection for Research Risk** — Location: The Hyatt Regency, Union Station, St. Louis, MO. Contact: Cathy Caruso, CME Office, Washington University School of Medicine, 660 S. Euclid, Box 8063, St. Louis, MO 63110. 1-800-325-9862 or 314/362-6893.

2 - 3 **Current Management in Critical Care** — Location: Allis Plaza Hotel, Kansas City, MO. Contact: Linda F. Smutz, Kansas City Southwest Clinical, 7920 Ward Parkway, Suite 205, Kansas City, MO 64114. 816/523-3383.

3 - 5 **OR Legal Environment: Medicine Response** — Location: Don CeSar Beach Resort, St. Peters burg, FL. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-533-2712.

8 - 9 **Focus on Acute Pediatric Conditions** — Location: St. John's Mercy Medical Center, von Gontard Conference Center, St. Louis, MO. Contact: Judith L. O'Guin, St. John's Mercy Medical Center, 615 S. New Ballas Rd., St. Louis, MO 63141. 314/569-6290.

8 - 10 **Pediatric Advanced Cardiac & Trauma Support for Life and Pediatric Advanced Life Support Course (PACTS/PALS)** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University Medical Center, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63140-1083. 1-800-533-2712.

10 - 11 **31st Annual Washington University Spring Meeting and Eye Alumni Association Meeting** — Location: Washington University, St. Louis, MO. Contact: Kathy Ryan, Washington University School of Medicine, 660 S. Euclid, St. Louis, MO 63110. 314/362-5722.

10 - 12 **Allergy For the Clinician** — Location: Ritz Carlton Hotel, St. Louis, MO. Contact: St. Louis School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-533-2712.

13 **City-Wide Radiology Lecture: "Intravascular Stents"** — Location: Mallinckrodt Institute of Radiology, St. Louis, MO. Contact: R. Gilbert Jost, M.D., Chief of Diagnostic Radiology, Mallinckrodt Institute of Radiology, 510 S. Kingshighway, St. Louis, MO 63110. 314/362-7130.

13 - 18 **Health Care Ethics in a Pluralistic Society** — Location: St. Louis University, Margaret McCormick Doisy Learning Resource Center, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand, St. Louis, MO 63104. 1-800-533-2712.

16 - 18 **Vascular Surgery 1991** — Location: The New York Marriott Marquis, New York, NY. Contact: Ann J. Boehme, CMP, Associate Director for Continuing Education, Long Island Jewish Medical Center, New Hyde Park, New York, NY 11042. 718/470-8650.

17 - 18 **Low Back & Sciatic Pain: Evaluation and Treatment** — Location: Washington University Medical Center, St. Louis, MO. Contact: Cathy Caruso, Washington University School of Medicine, CME Office, 660 S. Euclid, Box 8063, St. Louis, MO 63110. 1-800-325-9862 or 314/362-6893.

17 - 19 **Surgical Stabilization of Spinal Fractures: Hands-On State-Of-The-Art Workshop** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand, St. Louis, MO 63104. 1-800-533-2712 or 314/577-8167.

17 - 19 **Internal Medicine Review** — Location: University of Missouri, Columbia, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

31 - June 2 **A.K. Rice National Scientific Program** — Location: Ritz-Carlton Hotel, St. Louis, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

June

3 - 5 **Microsurgery of the Peripheral Nerve** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University School of Medicine, Continuing Medical Education, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

6 - 7 **Patent Development** — Location: Eldorado Hotel, Santa Fe, NM. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

6 - 8 **Microsurgery of the Spine: Stabilization** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University School of Medicine, Continuing Medical Education, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

7 **Perinatal Sonography: Clinical Applications** — Location: Adam's Mark Hotel, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand, St. Louis, MO 63104. 1-800-533-2712.

7 - 8 **Primary Pediatrics** — Location: University of Missouri, Columbia, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

10 - 15 **Microsurgery of the Brain** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University School of Medicine, Continuing Medical Education, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

20 - 23 **Missouri Academy of Family Physicians 43rd Annual Scientific Assembly** — Location: Marriott's Tan-Tar-A Resort, Osage Beach, MO. Contact: M.A.F.P., 222 W. Gregory Blvd., Suite G-1, Kansas City, MO 64114.

22 - 26 **Back to the Basics in the Tetons** — Location: Jackson Lake Lodge, Jackson, WY. Contact: Julie Potts/Anne Williamson, Missouri Postgraduate Course in Allergy, Inc., Suite A, 24-26 South Main Street, Liberty, MO 64068. 816/781-0902.

28 - 30 **Frontiers in Endosurgery (Urologists only)** — Location: Washington University Medical Center, St. Louis, MO. Contact: Cathy Caruso, CME Office, Washington University School of Medicine, 660 S. Euclid, Box 8063, St. Louis, MO 63110. 1-800-325-9862 or 314/362-6893.

29 - 30 **Advanced Cardiac Life Support Provider Course** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University Medical Center, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104-1083. 1-800-533-2712.

July

20 - 27 **9th Annual Medical Seminar, Topics in Contemporary Medicine** — Location: Plummer's Great Slave Lake Lodge, Northwest Territories, Canada. Contact: Joseph F. Bocklage, M.D., 103 Oakdale Medical Center, 3366 Oakdale Avenue North, Minneapolis, MN 55422. 612/588-9478.

26 **ACLS Recertification Course** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand, St. Louis, MO 63104. 1-800-533-2712.

31 - August 4 **Southern Association for Oncology 4th Annual Meeting** — Location: Crystal Palace, Nassau, Bahamas. Contact: Southern Association for Oncology, 205/942-0530.

August

7 - 11 **Southern Orthopaedic Association 8th Annual Meeting** — Location: The Broadmoor, Colorado Springs, CO. Contact: Southern Orthopaedic Association, 205/945-1848.

10 - 16 **Tenth Annual Scientific Meeting and Exhibition of the Society of Magnetic Resonance in Medicine** — Location: San Francisco, CA. Contact: SMRM, 1918 University Avenue, Suite 3C, Berkely, CA 94704. 415/841-1899. FAX: 415/841-2340.

September

18 - 20 **Pediatric Advanced Cardiac & Trauma Support For Life and Pediatric Advanced Life Support Course (PALS/PACTS)** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University Medical Center, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104-1083. 1-800-533-2712.

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Medical School News

University of Missouri-Columbia

■ **James M.A. Weiss, M.D.**, founding chairman of MU's department of psychiatry, has stepped down from the position after more than 30 years.

Dr. Weiss has resigned from his administrative duties and plans to devote more time to pursue research activities. School of Medicine Dean **Lester Bryant, M.D.**, has appointed **Bernard Beitman, M.D.**, professor of psychiatry, to serve as interim chairman while a search committee conducts a national hunt for a new department head.

James Weiss, M.D.

Dr. Weiss was appointed the University's first professor of psychiatry in 1960. The School of Medicine, which only recently had become a four-year program, offered no formal courses or clinical services in psychiatry. Dr. Weiss built a department now recognized internationally for research in forensic, social, psychosomatic and child psychiatry.

Under his leadership, a grant was secured in the mid-1960s to build the Mid-Missouri Mental Health Center, the country's first federally funded community health center.

■ **John L. Hart, D.O.**, director of physical medicine and rehabilitation at Still Regional Medical Center in Jefferson City, has been appointed chairman of MU's department of physical medicine and rehabilitation and the Howard A. Rusk Rehabilitation Center, announced Dean **Lester Bryant, M.D.**

One of Dr. Hart's goals is to better integrate rehabilitative services at the Health Sciences Center and them promote such integration statewide. An example would be for department specialists to play a greater role in treating patients with new injuries and disabilities in the acute-care setting. He also hopes to develop a model program for the testing, diagnosis and treatment of head injury patients, an emphasis of the department.

John L. Hart, D.O.

The chairmanship was vacated in August 1989 when **Paul Kaplan, M.D.**, accepted a similar position at Ohio State University. **Robert Frank, Ph.D.**, associate professor, had served as interim chairman since that time.

■ **Susan Buckelew, Ph.D.**, assistant professor of physical medicine and rehabilitation, presented "Biofeedback and Exercise Treatment of Fibromylagia: A Prospective Randomized Clinical Trial," March 17 at the Chest Pain Society meeting held in St. Louis, MO.

■ **Stephani Hanson, Ph.D.**, assistant professor of physical medicine and rehabilitation, presented "Multidisciplinary Assessment of Children with Learning Disabilities," in March at the Society of Behavioral Medicine's 12th annual scientific sessions in Washington, D.C.

■ **Jack J. Curtis, M.D.**, professor and chief of the Division of Cardiothoracic Surgery, presented "Automatic Internal Cardioverter Defibrillators: Development and Clinical Application," to members of the St. Louis Cardiac Club on February 12, in St. Louis, MO.

Washington University

■ The AIDS Clinical Trials Unit (ACTU) at Washington University School of Medicine has opened a satellite facility at St. Louis Regional Medical Center.

The facility, located in Regional Medical Center's Infectious Disease Clinic at 5535 Delmar, is open from 8:00 a.m. to 12:30 p.m. Mondays and Thursdays with plans to expand hours to 8:00 a.m. to 4:00 p.m. Mondays, Wednesdays and Thursdays.

The satellite facility is open to anyone who qualifies for care at Regional Medical Center. The purpose of the facility is to make it easier for underrepresented populations, in particular the medically indigent, blacks and IV drug users, to participate in AIDS-related drug studies while receiving primary care for HIV infection at the Regional clinic.

Currently 12% of Washington University's ACTU patients are black. However, in 1989 35% of all Missourians who tested positive for HIV were black, and researchers say there is a need to increase their access to drug studies.

All research costs, including experimental drugs and related tests, are provided free of charge. Routine care provided by the Infectious Disease Clinic is billed as normal.

The satellite facility was made possible by a $244,400 grant jointly funded by the National Institute of Allergy and Infectious Diseases and the National Institute of Drug Abuse. It is a supplement to the existing AIDS Clinical Trials grant with **Gerald Medoff, M.D.**, and **Lee Ratner, M.D., Ph.D.**, as co-principal investigators.

■ **Jeffrey I. Gordon, M.D.**, has been appointed chairman and alumni professor of the Department of Molecular Biology and Pharmacology at Washington University School of Medicine in St. Louis.

Dr. Gordon's apointment was announced by **William A. Peck, M.D.**, vice chancellor for medical affairs and dean of the School of Medicine. Dr. Gordon replaces **Oliver H. Lowry, M.D., Ph.D.**, who has been acting as interim head of the department since 1989. Dr. Lowry is a distinguished professor emeritus of pharmacology and was head of the department from 1947 to 1976.

Dr. Gordon is a professor of medicine and biochemistry and molecular biophysics at the School of Medicine and an associate physician at Barnes Hospital at Washington University Medical Center. He joined the Washington University faculty in 1981 as an assistant professor of medicine.

Dr. Gordon also directs the postgraduate Medical Scientist Training Program, an M.D., Ph.D. program designed to help young physician/scientists better integrate their clinical and research training.

■ **Dennis W. Choi, M.D., Ph.D.**, has been named the *Andrew B. and Gretchen P. Jones Professor* and head of neurology and co-head of the Department of Neurology and Neurological Surgery at Washington University School of Medicine in St. Louis.

Dr. Choi's appointment, effective July 1, 1991, was announced by **William A. Peck, M.D.**, vice chancellor for medical affairs at Washington University and dean of the School of Medicine. Dr. Choi will replace **William Landau, M.D.**, head of the neurology department since 1970, who is retiring from administrative duties as department head but will continue full-time with patient care, teaching and research. Landau's expertise is in movement disorders caused by damage to the nervous system, such as Parkinson's Disease and multiple sclerosis.

Dr. Choi comes to Washington University from Stanford Medical School, where he has been on the faculty since 1983. In addition to his School of Medicine position, he will serve as neurologist-in-chief at Barnes Hospital and on the staffs at Children's and Jewish hospitals.

■ Internationally renowned kidney expert **Marc R. Hammerman, M.D.**, has been named director of the Renal Division at Washington University School of Medicine in St. Louis.

The appointment was announced by **David M. Kipnis, M.D.**, *Adolphus Busch Professor* and chairman of the Department of Medicine. Dr. Hammerman is the third director in the division's 35-year history, succeeding **Neal Bricker, M.D.**, and **Saulo Klahr, M.D.** Dr. Klahr has become chairman of the Department of Medicine at Jewish Hospital at Washington University Medical Center and vice chairman of the Department of Medicine at the School of Medicine.

Dr. Hammerman, a professor of medicine and associate professor of cell biology and physiology, joined the faculty at the School of Medicine in 1977. A nephrologist and endocrinologist, he is best known for his innovative studies on biochemical mechanisms that affect renal growth and devlopment.

St. Louis University

■ **Fritz Schajowicz, M.D.**, professor of orthopedic pathology, St. Louis University School of Medicine was awarded the Golden Ehrenzeichen, or the Gold Star, from his native city, Vienna, Austria. The golden medal of honor is the highest distinction awarded by the city government of Vienna for cultural and scientific merit. Dr. Schajowicz was recognized for his research and teaching of bone pathology at the international level.

Dr. Schajowicz joined St. Louis University School of Medicine faculty in 1986. Prior to his arrival, he spent more than 45 years in Buenos Aires, Argentina, where he was professor at the University of Buenos Aires. In a career spanning more than 50 years, he also made stops in Italy, Sweden, Oxford, Chicago, Geneva and Nigeria, to conduct further research, that has enabled him to diagnose more than 30,000 cases of orthopedic pathology.

He holds titles with the World Health Organization (WHO), as director of the Latin American Registry of Bone Pathology and head of the International Reference Center for Histopathologic Diagnosis of Bone Tumors and Allied Diseases. He also serves as distinguished visiting professor at Rush-Presbyterian-St. Luke's Medical Center, Chicago; and professor of pathology at the University of Buenos Aires, Argentina.

■ **George T. Grossberg, M.D.**, professor of psychiatry and human behavior and director of the division of geriatric psychiatry, has been appointed to serve as a national member of the newly established Advisory Committee on Geriatrics and Gerontology Education (ACGGE) that has been organized by the Department of Veteran's Affairs (VA).

George Grossberg, M.D.

Dr. Grossberg and the 12-member panel will make recommendations to the VA about the current status and future directions of training and education in geriatrics and gerontology at all levels and all disciplines.

The membership of the ACGGE is an equal mix of education experts and geriatric and gerontology professionals from diverse disciplines, primarily from the VA but also including academicians from universities. Dr. Grossberg is the only psychiatrist serving on the panel.

■ **John E. Morley, M.D.**, *Dammert Professor of Gerontology* and director of the division of geriatric medicine in the department of internal medicine, has been appointed by the United States Pharmacopeial Convention, Inc., (USPI) to work on its drug information development programs.

John E. Morley, M.D.

The new national and international advisory panel consists of 26 experts who will help determine the content of the USP drug information data base and provide input relating to the clinical aspects of USP's work in the area of drug standards and information.

The information will be widely used by the medical and pharmaceutical communities to define drug utilization review parameters and to determine what patients should know about medications to help ensure safe and effective use.

■ **Randall C. Flanery, Ph.D.**, has been named assistant professor of psychiatry and human behavior director of the Eating Disorders Program in the division of behavioral medicine at St. Louis University School of Medicine.

Dr. Flanery comes to St. Louis from Chicago, where he was a clinical psychologist in private practice specializing in eating disorders. From 1985-1989, he established and directed a highly successful eating disorders program at Chicago's Lutheran General Hospital.

■ **Gary Spitzer, M.D.**, has been named professor of internal medicine and director of the division of oncology, St. Louis University School of Medicine.

Gary Spitzer, M.D.

Dr. Spitzer comes to St. Louis from the University of Texas M.D. Anderson Cancer Center where he was professor of internal medicine and deputy chief of bone marrow transplantation.

A native of Australia, Dr. Spitzer was awarded a Leukemia Society of America scholarship in 1973. He was appointed to the faculty at M.D. Anderson in 1974.

■ The department of otolaryngology-head and neck surgery at St. Louis University School of Medicine is now operating a clinic specifically targeted at adult stutterers.

Gary R. LaBlance, Ph.D., assistant professor of otolaryngology, chief of speech pathology, and director of the Voice Laboratory in the department of otolaryngology at St. Louis University School of Medicine, said the new state-of-the-art technology that is currently being used will enhance identifying and modifying these abnormalities.

Researchers have recently identified abnormal vocal fold movements and breathing patterns in many adults who stutter. It is believed that these aberrant movements play a significant role in stuttering. Dr. LaBlance is considered an area expert in the diagnosis and treatment of vocal problems. In addition to his position at the School of Medicine, he is also assistant professor and clinic director of the department of communication disorders at St. Louis University.

■ **Raj Nakra, M.D.**, associate professor of psychiatry and human behavior and director of the adult out-patient clinic, has been awarded a one-year, $34,692 grant from Hoechst-Roussel Pharmaceuticals. The grant will support research to evaluate and study the effectiveness of a new drug in the treatment for Alzheimer's disease.

University of Missouri-Kansas City

■ The UMKC School of Medicine will officially celebrate its 20th anniversary this year. The inauguration ceremony for the new school took place October 18, 1971. The school's current facility was still three years from completion, but the first freshman class of 36 students, in addition to 58 advanced students, began attending classes on August 30, 1971.

■ The UMKC School of Medicine Alumni and Friends Association has formed and its steering committee met for the first time in January.

The purpose of the association is to promote and advance the work of the medical school. Other goals are to foster closer ties among medical school and other UMKC alumni. **Mark Litzler**, manager of Alumni/Advancement at the medical school, and **Mary McCamy**, assistant manager, will oversee the association.

Gary Bodenhausen, M.D., a 1974 graduate, is chairman of the steering committee. Other members are **George Ahlering, M.D., Meri Chen, M.D., Mary Beth Esswein, M.D., Milt Grin, M.D., Mary Lee Heim, M.D., Mark Mitchell, M.D., David Moore, M.D., Charlene Prather, M.D., Nicholas Robinson, M.D., Skip Sallee, M.D., Gary Salzman, M.D., Mark Scarborough, M.D., Betty Scarborough, M.D., Lesley Schroeder, M.D., Mark Steele, M.D., Marc Taormina, M.D.**, and **Michael Weaver, M.D.**

■ **Thomas M. Holder, M.D.**, clinical professor of surgery, has been appointed to the medical school's newly created position of associated dean for Children's Mercy Programs.

Dr. Holder, chief of Thoracic and Cardiovascular Surgery at Children's Mercy, has held his faculty appointment at the medical school since 1972.

■ **Alan D. Forker, M.D.**, has been appointed a docent and chief of cardiology at the medical school. Dr. Forker previously was in private practice at the Nebraska Heart Institute at Bryan Memorial Hospital, Lincoln, Neb., and was clinical associate professor at the University of Nebraska Medical Center.

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Assignment of PRO Points to Residents

Gregory A. Hill, D.O.
Kansas City

Issues from the 1990 interim meeting of the AMA Resident Physicians' Section House of Delegates held November 3 - December 2, 1990 in Orlando, Florida.

Background

The Peer Review Organization (PRO) was created by congressional legislation in 1982 and is contracted under the Health Care Financial Administration (HCFA) as part of the prospective payment system (Medicare). The PROs periodically review hospital admissions to determine the appropriateness of the admission and procedures done during a patient's hospitalization.

Under HCFA's Quality Intervention Plan (QIP), when a PRO identifies a quality care problem, it is required to identify the source of the problem, whether it be the hospital or the physician. Once a source is found, a letter is generated addressing the issue. The individual or institution cited has 30 days to refute the issue with the PRO physician. If, after review of the rebuttal, the PRO fails to alter its verdict, a set number of points (1-25) will be assigned depending on the severity of the offense. Each quarter PROs compile a profile of physicians and providers, based on the accumulating number of points. Once a sufficient number of points accrue, the PROs can implement a number of interventions as specificied by the QIP. Such interventions can include pre-admission approval, mandatory continuing of education, and the notification of findings to the federal in-state licensing bureaus.

Issues

In 1990, HCFA expanded Peer Review and sanctioning to include physicians in training (interns, residents, and fellows). This action raised several concerns:

- Residents may never receive these quality care notices. These letters are addressed to the hospital in which the incident occurred and not to the individual. Since residents train at several institutions, they may never receive notification and thus, lose the opportunity to dispute the issue.

- Training programs do not provide adequate education nor inform residents how to handle these notifications, once they are received. The resident may not know what to do with the letter even if he or she does receive it.

- Many training programs have a hierarchy of housestaff. The senior housestaff or attending staff dictate the manner in which patient care is to be given. These decisions may not reflect the views of the junior housestaff, whose names appear on the chart, since they are merely "carrying out orders."

- In 1987, the AMA House of Delegates adopted a policy "that there should be one physician responsible for the care of the patient" and that person "shall be the attending physician." Attending physicians in many programs are susceptible to accruing a large volume of points due to events over which they have had little control. This is likely to drive many attending staff away from teaching and in turn, jeopardize the future of medical education.

•The PROs themselves have had difficulties and concerns because of: difficulty in deciding what further type of education is needed for the physician in training and difficulty in identifying residents, since they are not listed on hospital records as the attending of record.

Resolutions

In lieu of the multiple concerns regarding peer review and sanctioning of physicians in training, HCFA is reconsidering its existing policy.

In September, 1990 HCFA met with members of the Association of American Medical Colleges, American Medical Association, American College of Surgeons, American College of Physicians, and the American Society of Internal Medicine to discuss point assignment to residents. Several recommendations were agreed upon at the meeting. In summary, they agree that in any instance where residents are the source of quality care problems, the training program will be responsible for notifying the resident and will be charged with devising a corrective plan monitored by the PRO. Also, attending physicians of "non-private" patients will have the opportunity to accept or waive the initial notices to the training institution.

More recently, at the 1990 Interim Meeting of the AMA-RPS House of Delegates, the delegations of Missouri, California, and Ohio proposed several resolutions calling for the waiving of points to residents, assignment of points to the training programs, and the establishment of corrective plans by the programs. These proposals were amended into a single resolution, accepted by the House and submitted to the AMA House of Delegates' Interim Meeting in December, 1990.

At this meeting, several resolutions were introduced calling for the reformation of PRO assignments to residents. The delegation waived these resolutions in favor of the recommendations and joint report of the Council of Medical Services and Council of Medical Education. A synopsis of these recommendations follows:

1. Residents shall not be assigned QIP points for activities conducted while in a training program. Activities performed outside the program (i.e., moonlighting) will be subject to peer review and sanctioning by the PRO.

2. PROs shall notify the training program and the resident of quality care problems. The program director and resident will next receive corrective notification so that corrective action can be undertaken.

3. Training programs are to devise a corrective plan of action, which will be available to the PRO and the ACGME during their on-site credentialing visits.

4. Upon completion of training, the resident will depart without any QIP points, cannot be excluded from participation in Medicare programs based on past activities, and corrective notifications accrued shall remain confidential from all other parties.

5. Attending staff are not assigned points when the problem clearly identifies the resident as the source of the problem.

6. The AMA will study the impact of HCFA's QIP regulations on graduate medical education.

The above recommendations are those set forth by the AMA House of Delegates and the Councils of Medical Education and Medical Services. These policies are in effect to assist HCFA in their reconsideration of the existing policies. As of date, these policies remain unchanged.

References

1. Petersdorf R: *PRO and the assignemnt of points to residents.* AAMC Memorandum #90-32, July 19, 1990.
2. AAMAC Washington Highlights. September 23, 1990, p 4.
3. Rodkey G, Reals W: *Applications of PRO QIP to Residency and Attending Physicians.* (Resolution #281, A-90).
4. Report of the AMA House of Delegates, Reference Committee G, Item #10, I-90.

Editor's Note: *Dr. Hill is a Missouri delegate to the American Medical Association Resident Physicians' Section. He is currently an internal medicine resident at the University of Missouri-Kansas City and St. Luke's Hospital in Kansas City, Missouri.*

New Members

■ **Alan W. Adams, M.D.**, 3501 N. 36th St., St. Joseph 64506, has become a member of the Buchanan County Medical Society. Dr. Adams received his preliminary education at the University of Kansas and obtained his medical degree at the University of Kansas Medical School in 1980. He completed his residency at the University of Kansas Medical Center, Kansas City, KS. Dr. Adams specializes in family practice.

■ **Sean B. Bailey, M.D.**, 6356 Clayton Road, St. Louis 63117, has become a member of the St. Louis Metropolitan Medical Society. Dr. Bailey obtained his medical degree at the Tulane University School of Medicine in 1987. He completed his residency at Barnes Hospital, St. Louis, MO. Dr. Bailey specializes in head and neck surgery.

■ **Robert Bailiff, M.D.**, 3660 S. National, Springfield 65807, has become a member of the Greene County Medical Society. Dr. Bailiff received his preliminary education at Eastern Kentucky University and obtained his medical degree at the University of Kentucky College of Medicine in 1982. He completed his residency at the University of Kentucky, Lexington, KY. Dr. Bailiff specializes in anesthesiology.

■ **Kenneth K. Bartholomew, M.D.**, Blessing Hospital Radiology, 11th and Broadway, Quincy, IL 62301, has become a member of the Missouri State Medical Association. Dr. Bartholomew received his preliminary education at Denison University and obtained his medical degree at the Cincinnati College of Medicine in 1969. He completed his residency at Cleveland Clinic, Cleveland, OH. Dr. Bartholomew specializes in radiology.

■ **Francis M. Blackwell, M.D.**, Ferguson Medical Group, 1012 N. Main, Sikeston 63801, has become a member of the SEMO County Medical Society. Dr. Blackwell received his preliminary education at Clemson University and obtained his medical degree at the Medical University of South Carolina in 1984. He completed his residency at the Medical Center of Central Georgia/Mercy University School of Medicine, Macon, GA. Dr. Blackwell specializes in general surgery.

■ **James M. Brennan, M.D.**, 5957 Highfield Road, St. Louis 63109, has become a member of the Missouri State Medical Association. Dr. Brennan obtained his medical degree at the St. Louis University School of Medicine in 1981. He completed his residency at the University Hospital, St. Louis University Medical Center, St. Louis. Dr. Brennan specializes in obstetrics/gynecology.

■ **Joseph A. Buth, M.D.**, 919 Kingsway Mall, Sikeston 63801, has become a member of the Missouri State Medical Association. Dr. Buth received his preliminary education at the University of South Florida and obtained his medical degree at the University of Miami School of Medicine in 1982. He completed his residency at Alachua General Hospital, Gainesville, FL. Dr. Buth specializes in emergency medicine.

■ **Mary A. Butler, M.D.**, 711 Grand Ave., P.O. Box 311, Hannibal 63401, has become a member of the Northeast Missouri County Medical Society. Dr. Butler received her preliminary education and obtained her medical degree at the University of Missouri-Kansas City School of Medicine in 1985. She completed her residency at St. Luke's Hospital, Kansas City, MO. Dr. Butler specializes in anesthesiology.

■ **Stephen M. Butler, M.D.**, 711 Grand Ave., P.O. Box 311, Hannibal 63401, has become a member of the Northeast Missouri County Medical Society. Dr. Butler received his preliminary education and obtained his medical degree at the University of Missouri-Kansas City School of Medicine in 1985. He completed his residency at St. Luke's Hospital, Kansas City. Dr. Butler specializes in general surgery.

■ **Cheryl M. Coffin, M.D.**, Barnes Hospital, One Barnes Hospital Plaza, St. Louis 63310, has become a member of the St. Louis Metropolitan Medical Society. Dr. Coffin obtained her medical degree at the University of Vermont in 1980. She completed her residency at the University of Minnesota Hospital & Clinic, Minneapolis, MN. Dr. Coffin specializes in anatomic and clinical pathology.

■ **Glen E. Cooper, D.O.**, Columbia Spine Rehabilitation Center, 3501 Berrywood, Columbia 65201, has become a member of the Boone County Medical Society. Dr. Cooper received his preliminary education at Northeast Missouri State University and obtained his osteopathic degree at the Kirksville College of Osteopathic Medicine in 1978. He completed his residency at the University of Missouri Hospital and Clinics, Columbia, MO. Dr. Cooper specializes in spine rehabilitation.

■ **Gregory J. Downing, D.O.**, Children's Mercy Hospital, 24th and Gillham, Kansas City 64108, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. Downing received his preliminary education at Ferris State University and obtained his osteopathic degree at the Michigan State University College of Osteopathic Medicine in 1984. He completed his residency at J.F. Kennedy Memorial Hospital, Stratford, NJ. Dr. Downing specializes in pediatrics.

■ **Sallie E. Drabinowicz, M.D.**, 901 S. National, Springfield 65804, has become a member of the Greene County Medical Society. Dr.

Drabinowicz received her preliminary education at St. Louis University and obtained her medical degree at the University of Illinois School of Medicine in 1980. She completed her residency at the University of Wisconsin, Madison, WI. Dr. Drabinowicz specializes in family practice.

■ **John W. Esther, M.D.,** 1900 S. National, Suite 1800, Springfield 65804, has become a member of the Greene County Medical Society. Dr. Esther received his preliminary education and obtained his medical degree at the University of Missouri-Kansas City School of Medicine in 1986. He completed his residency at Johns Hopkins Hospital, Baltimore, MD. Dr. Esther specializes in anesthesiology.

■ **Michael T. Gadson, M.D.,** 636 Hampshire, Quincy, IL 62301, has become a member of the Northeast Missouri County Medical Society. Dr. Gadson received his preliminary education at Williams College and obtained his medical degree at the University of Connecticut Medical School in 1983. He completed his residency at Georgetown University, Washington, D.C. Dr. Gadson specializes in psychiatry.

■ **William M. Gilbirds, II, M.D.,** 8630 N. Oak, Kansas City 64155, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. Gilbirds received his preliminary education and obtained his medical degree at the University of Missouri-Kansas City School of Medicine in 1986. He completed his residency at St. Mary's Hospital, Kansas City, MO. Dr. Gilbirds specializes in family practice.

■ **Mary V. Hastings, M.D.,** Auxvasse Medical Center, Auxvasse 65231, has become a member of the Audrain County Medical Society. Dr. Hastings received her preliminary education and obtained her medical degree at the University of Missouri-Kansas City School of Medicine in 1984. She completed her residency at the University of Kansas Department of Family Medicine, Kansas City, KS. Dr. Hastings specializes in family practice.

■ **Thomas F. Hastings, M.D.,** 809 Medical Park Drive, Suite 104, Mexico 65265, has become a member of the Audrain County Medical Society. Dr. Hastings received his preliminary education at Rockhurst College and obtained his medical degree at the University of Missouri-Kansas City School of Medicine in 1986. He completed his residency at the Kansas University Medical Center, Kansas City, KS. Dr. Hastings specializes in internal medicine.

■ **Charles B. Huddleston, M.D.,** 400 S. Kingshighway, St. Louis 63110, has become a member of the Missouri State Medical Association. Dr. Huddleston received his preliminary education at the University of Missouri-Columbia and obtained his medical degree at the Vanderbilt University School of Medicine in 1978. He completed his residency at the Vanderbilt Medical Center, Nashville, TN. Dr. Huddleston specializes in cardiothoracic surgery.

■ **Steven J. Judge, M.D.,** 200 Madison Ave., Washington 63090, has become a member of the Franklin-Gasconade-Warren County Medical Society. Dr. Judge received his preliminary education at the University of Missouri-Columbia and obtained his medical degree at the St. Louis University School of Medicine in 1985. He completed his residency at St. John's Mercy Medical Center, St. Louis, MO. Dr. Judge specializes in internal medicine.

■ **Kenneth L. Koontz, M.D.,** 1010 Carondelet Dr., Suite 114, Kansas City 64114, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. Koontz received his preliminary education at the University of Kansas and obtained his medical degree at the University of Kansas School of Medicine in 1985. He completed his residency at the University of Kansas Medical Center, Kansas City, KS. Dr. Koontz specializes in diagnostic radiology.

■ **Frank W. Kroetz, M.D.,** 1012 N. Main, Sikeston 63801, has become a member of the SEMO County Medical Society. Dr. Kroetz received his preliminary education at Heidelberg College and obtained his medical degree at the Ohio State University School of Medicine in 1957. He completed his residency at the University of Texas Medical Branch, Galveston, TX. Dr. Kroetz specializes in cardiology.

■ **Albert T. Lambert, M.D.,** Dept. of Internal Medicine, GLWACH, Ft. Leonard Wood 65473, has become a member of the Mid-Missouri County Medical Society. Dr. Lambert received his preliminary education at the University of Florida and obtained his medical degree at the University of Miami School of Medicine in 1987. He completed his residency at the University of Texas Health Sciences Center, Parkland Memorial Hospital, Dallas, TX. Dr. Lambert specializes in internal medicine.

■ **Melinda Ligon, D.O.,** 11133 Dunn Rd., St. Louis 63104, has become a member of the Missouri State Medical Association. Dr. Ligon received her preliminary education at Texas Tech University and obtained her osteopathic degree at the Texas College of Osteopathic Medicine in 1980. She completed her residency at the Normandy Osteopathic Hospital, St. Louis, MO. Dr. Ligon specializes in emergency medicine.

■ **Michael L. Madden, M.D.,** 7900 Lee's Summit Rd., Kansas City 64139, has become a member of the Missouri State Medical Association. Dr. Madden received his preliminary education at Louisiana State University and obtained his medical degree at the LSU School of Medicine in 1967. He completed his residency at Lafayette Charity Hospital, Lafayette, LA. Dr. Madden specializes in family practice.

■ **Marc D. Malkoff, M.D.,** St. Louis University Medical Center, Dept. of Neurology, 10 South FDT, 3635 Vista at Grand Blvd., St. Louis 63110, has become a member of the St. Louis Metropolitan Medical Society. Dr. Malkoff obtained his medical degree at the Northeastern Ohio University College of Medicine in 1984. He completed his residency at Emory University, Atlanta, GA. Dr. Malkoff specializes in neurology.

■ **Steven M. Mardjetko, M.D.,** 1465 S. Grand Blvd., St. Louis 63104, has become a member of the St. Louis Metropolitan Medical Society. Dr. Mardjetko obtained his medical degree at the University of Illinois Medical School in 1982. He completed his residency at the University of Illinois, Chicago, IL. Dr. Mardjetko specializes in orthopedic surgery.

■ **James W. Martin, M.D.,** 800 E. Fifth St., Washington 63090, has become a member of the Franklin-Gasconade-Warren County Medical Society. Dr. Martin received his preliminary education at Westminster College and obtained his medical degree at the St. Louis University School of Medicine in 1987. He completed his residency at the Internal Medicine Clinic, Spokane, WA. Dr. Martin specializes in internal medicine.

■ **Brian L. McCroskey, M.D.,** 6420 Prospect, T505, Kansas City 64132, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. McCroskey received his preliminary education at the University of Kansas and obtained his medical degree at the University of Kansas School of Medicine in 1979. He completed his residency at the University of Kansas Medical Center, Kansas City, KS. Dr. McCroskey specializes in vascular and general surgery.

■ **Donald J. Metry, Jr., M.D.,** 103 Eleventh St., Suite 16, Chillicothe 64601, has become a member of the Grand River County Medical Society. Dr. Metry received his preliminary education at the University of Kentucky and obtained his medical degree at the University of Louisville School of Medicine in 1987. He completed his residency at the University of Louisville, Louisville, KY. Dr. Metry specializes in internal medicine.

■ **Teresa A. Olsen, M.D.,** 3231 S. National, Springfield 65807, has become a member of the Greene County Medical Society. Dr. Olsen received her preliminary education at the University of Iowa and obtained her medical degree at the University of Nebraska College of Medicine in 1987. She completed her residency at the University of Iowa Hospital and Clinics, Iowa City, IA. Dr. Olsen specializes in internal medicine.

■ **Patrick M. O'Toole, M.D.,** 1010 Carondelet Dr., Suite 114, Kansas City 64114, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. O'Toole received his preliminary education and obtained his medical degree at the University of Missouri-Kansas City in 1986. He completed his residency at the University of Kansas Medical Center, Kansas City, KS. Dr. O'Toole specializes in diagnostic radiology.

■ **Ashokkumar B. Patel, M.D.,** 401 Pine, St. Louis 63102, has become a member of the St. Louis Metropolitan Medical Society. Dr. Patel obtained his medical degree at the Gujarat University, India in 1969. He completed his residency at St. Luke's Hospital, St. Louis, MO. Dr. Patel specializes in occupational medicine.

■ **Joseph R. Payne, M.D.,** 3101 Broadway-1000, Kansas City 64111, has become a member of the Missouri State Medical Association. Dr. Payne received his preliminary education at the University of Kansas and obtained his medical degree at the University of Kansas School of Medicine in 1966. He completed his residency at the Denver General Hospital, Denver, CO. Dr. Payne specializes in emergency medicine.

■ **Raul E. Perez, M.D.,** 621 S. New Ballas Rd., St. Louis 63141, has become a member of the St. Louis Metropolitan Medical Society. Dr. Perez obtained his medical degree at the University of Maryland in 1977. He completed his residency at St. John's Mercy Medical Center, St. Louis, MO. Dr. Perez specializes in obstetrics/gynecology.

■ **Jay M. Portnoy, M.D.,** Children's Mercy Hospital, Kansas City 64108, has become a member of the Missouri State Medical Association. Dr. Portnoy received his preliminary education at the University of Michigan and obtained his medical degree at the University of Missouri-Columbia School of Medicine in 1980. He completed his residencies at Children's Mercy Hospital, Kansas City, MO, and the University of Michigan, Ann Arbor, MI. Dr. Portnoy specializes in pediatric allergy.

■ **Marianne U. Prey, M.D.,** SmithKline Beecham, 2040 Concourse, St. Louis 63146, has become a member of the St. Louis Metropolitan Medical Society. Dr. Prey obtained her medical degree at the University of Illinois School of Medicine in 1982. She completed her residency at St. John's Mercy Medical Center, St. Louis, MO. Dr. Prey specializes in pathology.

■ **Keith M. Ratcliff, M.D.,** Rt. 1, Box 291K, Washington 63090, has become a member of the Franklin-Gasconade-Warren County Medical Society. Dr. Ratcliff received his preliminary education at Washington University and obtained his medical degree at the University of Missouri-Columbia School of Medicine in 1986. He completed his residency at the University of Missouri-Columbia Hospital and Clinics, Columbia, MO. Dr. Ratcliff specializes in family practice.

■ **Jay G. Robinson, M.D.,** 6700 Troost, Suite 436, Kansas City 64131, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. Robinson received his preliminary education at the University of Minnesota and obtained his medical degree at the University of Minnesota School of Medicine in 1980. He completed his residency at the Kansas University Medical Center, Kansas City, KS. Dr. Robinson specializes in neurology.

■ **Philip J. Schmitt, M.D.,** 675 Old Ballas Rd., St. Louis 63141, has become a member of the St. Louis Metropolitan Medical Society. Dr. Schmitt obtained his medical degree at the Washington University School of Medicine in 1979. He completed his residency at Jewish Hospital, St. Louis, MO. Dr. Schmitt specializes in general surgery.

■ **Douglas A. Schneider, M.D.,** Emergency Department, St. Luke's Hospital, 44th and Wornall, Kansas City 64111, has become a member of the Missouri State Medical Association. Dr. Schneider received his preliminary education at Midwestern State University and obtained his medical degree at the University of Texas Health Sciences Center Medical School in 1982. He completed his residency at the University Hospital, Jacksonville, Fl. Dr. Schneider specializes in emergency medicine.

■ **Gene P. Smith, D.O.,** 1008 N. Main, Sikeston 63801, has become a member of the SEMO County Medical Society. Dr. Smith received his preliminary education at Henderson State University and obtained his osteopathic degree at the Kansas City College of Osteopathic Medicine in 1973. He completed his residency at Normandy Osteopathic Hospital, St. Louis, MO. Dr. Smith specializes in emergency medicine.

■ **Gilbert D. Smith, M.D.,** 686 Lester, P.O. Box 220, Poplar Bluff 63901, has become a member of the Butler-Wayne-Ripley-Carter County Medical Society. Dr. Smith received his preliminary education at the University of Missouri-Columbia and obtained his medical degree at the MU School of Medicine in 1978. He completed his residency at Southern Illinois University and Affiliated Hospitals, Springfield, IL. Dr. Smith specializes in family practice.

■ **Thomas H. Spence, Jr., M.D.,** 3015 N. Ballas Rd., St. Louis 63131, has become a member of the St. Louis Metropolitan Medical Society. Dr. Spence received his preliminary education at Westminster College and obtained his medical degree at the St. Louis University School of Medicine in 1979. He completed his residency at Willford Hall, USAF, Lackland, TX. Dr. Spence specializes in pulmonary/critical care medicine.

■ **Vickie R. Shannon, M.D.,** 660 S. Euclid, P.O. Box 8052, St. Louis 63121, has become a member of the Missouri State Medical Association. Dr. Shannon received her preliminary education at Smith College and obtained her medical degree at the Washington University School of Medicine in 1983. She completed her residency at the University of Texas, Houston, TX. Dr. Shannon specializes in pulmonary medicine.

■ **Jeffrey R. Tedrow, M.D.,** 1300 Oakland, Bolivar 65613, has become a member of the Dallas-Hickory-Polk-Dade County Medical Society. Dr. Tedrow received his preliminary education at the University of Missouri-Columbia and obtained his medical degree at the MU School of Medicine in 1987. He completed his residency at Florida Hospital, Orlando, FL. Dr. Tedrow specializes in family practice.

■ **Gregory E. Walker, M.D.,** 1515 W. Truman Rd., #408, Independence 64050, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. Walker received his preliminary education and obtained his medical degree at the University of Missouri-Kansas City School of Medicine in 1981. He completed his residency at the Mayo Graduate School of Medicine, Rochester, MN. Dr. Walker specializes in neurological surgery.

■ **Russell S. Yocum, D.O.,** Platte Medical Clinic, P.C., 224 Marshall Rd., P.O. Box 980, Platte City 64079, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. Yocum received his preliminary education at the University of Missouri-Columbia and obtained his osteopathic degree at the Kirksville College of Osteopathic Medicine in 1986. He completed his residency at Good Samaritan Hospital and Health Center, Dayton, OH. Dr. Yocum specializes in family practice.

Resident Members

Grace A. Albano, M.D. — *internal medicine*
Morrisa Baskin, M.D. — *dermatology*
Mark F. Brinkman, M.D. — *anesthesia*
Jan Bury, M.D. — *obstetrics/gynecology*
Gayln Von Clar, M.D. — *internal medicine*
Kirk K. Garmager, M.D. — *diagnostic radiology*
Kristie L. Gast, M.D. — *internal medicine*
Bonnie K. Goins, M.D. — *internal medicine*
Dwight E. Gurley, M.D. — *internal medicine*
Deborah M. Hall, M.D. — *internal medicine*
Maureen L. Lacour, M.D. — *internal medicine*
Molly J. Lewandowski, M.D. — *internal medicine*
Debra K. Madaj, M.D. — *internal medicine*
Mark A. Martindale, M.D. — *internal medicine*
Bruce N. Monson, M.D. — *radiology*
Brian P. Murphy, M.D. — *internal medicine*
Louis A. Orlando, M.D. — *internal medicine*
Vincent J. Quinlan, M.D. — *anesthesia*
John S. Rabun, M.D. — *psychiatry*
Colleen C. Reisz, M.D. — *internal medicine*
Lisa A. Riojas, M.D. — *no specialty designated*
Anuradha H. Sarma, M.D. — *internal medicine*
Michael J. Smith, M.D. — *internal medicine*
Joe E. Snodgrass, M.D. — *internal medicine*

Thomas J. Stauder, M.D. — *internal medicine*
James H. Sullivan, M.D. — *radiology*
John B. Terry, M.D. — *internal medicine*
Elizabeth A. Wickstrom, M.D. — *obstetrics/gynecology*
Brent M. Wogahn, M.D. — *surgery*

Student Members

University of Missouri-Kansas City

Patricia J. Blair
Himanshu Gupta

Washington University

Andrew N. Blatt
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References:
1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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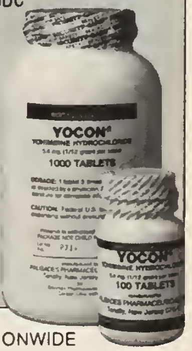

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Physician's Recognition Awards

Fifty-two MSMA members qualified for the MSMA-AMA Physician's Recognition Award during January 1991. The award, presented by the Missouri State Medical Association and the American Medical Association, is given to those physicians who voluntarily complete 150 credit hours of continuing medical education within a three-year period. Sixty of the credit hours must be earned in Category 1 programs.

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In Memoriam

■ **Bernard H. Flotte, M.D.**, died November 27, 1990 at the age of 90. Dr. Flotte, an internist, practiced medicine in St. Louis. He obtained his medical degree at the St. Louis University School of Medicine in 1929. Dr. Flotte was a member of the St. Louis Metropolitan Medical Society.

■ **Leon J. Fox, M.D.**, died January 28, 1991 at the age of 75. Dr. Fox, an orthopedic surgeon, practiced medicine in St. Louis for nearly 40 years. He served on the staff at Jewish Hospital and also served as chief of surgery at the hospital. He obtained his medical degree at the Washington University School of Medicine in 1939. Dr. Fox was a member of the St. Louis Metropolitan Medical Society.

■ **Melvin L. Goldman, M.D.**, died January 4, 1991 at the age of 72. Dr. Goldman, an internist, practiced medicine in St. Louis for 47 years. A lifelong resident of University City, he retired in 1990. He served on the staffs of Jewish and Barnes hospitals, as well as St. John's Mercy Medical Center. He obtained his medical degree at the Washington University School of Medicine in 1943. Dr. Goldman was a member of the St. Louis Metropolitan Medical Society.

■ **James A. Hasek, M.D.**, died December 10, 1990 at the age of 54. Dr. Hasek, a family practitioner, practiced medicine in Mountain Grove. He obtained his medical degree at the University of Missouri-Columbia School of Medicine in 1961. Dr. Hasek was a member of the South Central County Medical Society.

■ **Merle B. Herriford, M.D.**, died December 20, 1990, at the age of 71. Dr. Herriford, a urologist, practiced medicine in St. Louis for many years before retiring in 1987. He was the first black board-certified urologist in the United States. He also served as a senior instructor in urology at St. Louis University School of Medicine. He obtained his medical degree at the Howard University College of Medicine in 1942. Dr. Herriford was a member of the St. Louis Metropolitan Medical Society.

■ **William M. Kitchen, M.D.**, died January 26, 1991, at the age of 77. Dr. Kitchen, a radiologist, practiced medicine in the Kansas City area for more than 37 years before he retired in 1982. He served on the staff of St. Mary's Hospital and was a past president of the Metropolitan Medical Society of Greater Kansas City. He obtained his medical degree at the Washington University School of Medicine in 1937. Dr. Kitchen was a member of the Metropolitan Medical Society of Greater Kansas City.

■ **Alfred F. Sudholt, Jr., M.D.**, died January 26, 1991, at the age of 71. Dr. Sudholt, an obstetrician, practiced medicine in the St. Louis area for more than 40 years, before retiring in 1986. He was affiliated with DePaul Health Center in Bridgeton, where he served as chairman of the department of obstetrics and gynecology for eight years. He also served on the staff of St. John's Mercy Medical Center in Creve Coeur. He obtained his medical degree at the Washington University School of Medicine in 1943. Dr. Sudholt was a member of the St. Louis Metropolitan Medical Society.

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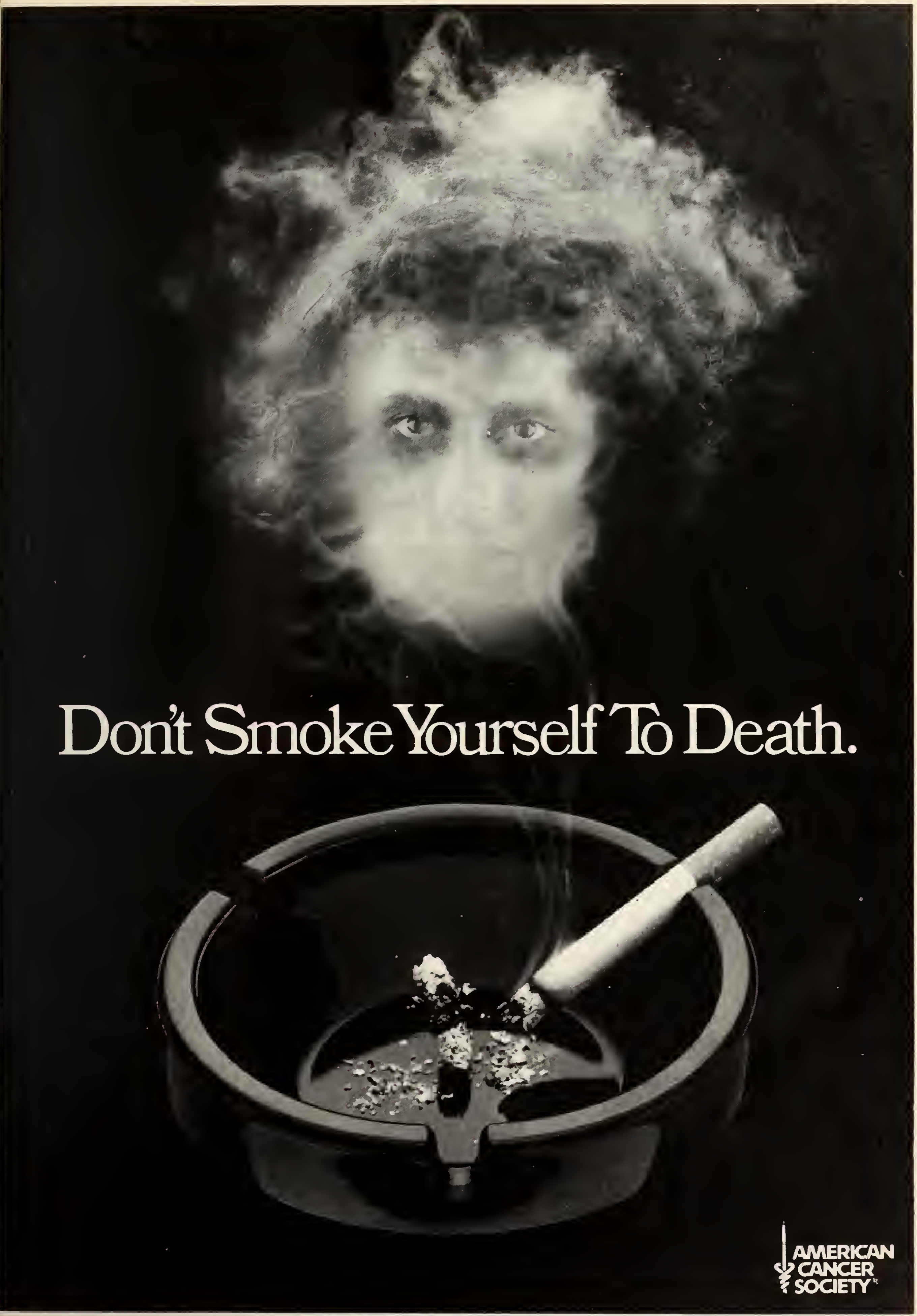
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GUEST EDITORIAL

by S. Robert Kovac,
M.D., FACOG, FACS
St. Louis, Missouri

Has vaginal surgery become a thing of the past or will it make a comeback in the 90s?

Consensus By Default?

A conceptual approach that predicates physician decision making about clinical interventions is based on the presence of well-defined and disciplined scientific norms, that is, a professional consensus that exists to regulate results and marshall resources for predictable, reliable and rational outcomes. The discipline, order and control this requires also mandates physicians who willingly ascribe to these tenets. When a consensus is lacking or ambiguous, as is the case for the operative approach selection for hysterectomy, physician decision making is driven by subjective factors incorporating physicians' values, attitudes, tastes, and habits. These factors are certainly influenced by one's residency training.

Vaginal surgery spawned the specialty of gynecology, yet, medical school faculties and many residency programs today lack individuals qualified to teach vaginal surgery. Residency review committees are rightly concerned about how many vaginal hysterectomies are being performed during a resident's training before a gynecologist can qualify as a vaginal surgeon. Past surveys of obstetrics and gynecology residents upon training completion, have indicated that only five percent of their time was devoted to surgery and most of that to minor surgery. Surprisingly, some candidates to the American Board of Obstetrics and Gynecology have not performed any vaginal hysterectomies during their training.

Historically, the gynecologic surgeon found clever ways to explore and operate within the abdominal cavity. The vagina was their first route. Presently, the gynecologic surgeon has been a surgical leader with the use of the laparoscope and remains in the forefront using innovative techniques in pelviscopy surgery. Even our general surgeon colleagues have begun to recognize the value of pelviscopy surgery to improve the morbidity associated with large abdominal incisions as well as hasten recovery for cholecystectomy patients.

From the article by Garceau in the *American Journal of Obstetrics* in March of 1895 until the present, numerous advantages of the vaginal approach have been adequately expressed by many vaginal surgeons. Data from the 1982 Centers for Disease Control (Crest Study) suggested that for similar conditions, vaginal hysterectomy may be safer than the abdominal procedure in terms of febrile morbidity and hemorrhage. The findings of this study were disputed in Telinde's Operative Gynecology on grounds that patients with more serious pelvic disease, and presumably a more complicated operative and postoperative course, generally receive abdominal hysterectomies. However, today the major contraindication to vaginal hysterectomy may not be serious pathology but surgeons' inexperience. The list of contraindications to vaginal surgery (not necessarily those of vaginal surgeons') seem to be increasing yearly.

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■ Guest Editorial

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Gynecologists in the past believed that if an operation could be safely performed vaginally it should receive preferential selection over other methods. Vaginal surgeons have known for years that patients tolerate and recuperate more rapidly with the vaginal approach.

Not all hysterectomies demand a specific operative approach, namely, for similar conditions, hysterectomies can be performed either vaginally or abdominally. The goal of physician decision-making under these conditions would be to select the operative approach that patients find desirable by comparing the outcomes of alternative approaches for hysterectomy. If current trends for selecting the abdominal approach persist, important data outcome analysis will be hindered, if not impossible. Patients may not be consulted or become knowledgeable about alternative therapy, thus, gynecologists, because of their limited surgical training, might further project their own preferences onto their patients. Will the consequences of that selection be in the best interest of the patient?

Past opposing Cold War dictums concerning the relative efficacy of the vaginal or abdominal hysterectomy approach are rapidly giving way to a new educational "glasnost" rooted in clinical effectiveness and measurable patient outcomes to improve care and identify optimal practices at a reasonable cost; "The Vision Thing," is becoming "The Values Thing."

Insurance companies, government entities, and managed care programs who are looking for ways to evaluate the quality of care they are reviewing and/or purchasing from providers will become more confused since the indications for surgical route selection for hysterectomy is less than clear. They may need to rethink their present length of stay allowance of three days for vaginal and four days for abdominal hysterectomy. Failure by these parties to have supportive documentation for rational surgical decisions puts an ever-increasing burden on corporate America, already reeling under resource limitations and double-digit increases in medical care for its employees and retirees.

Our specialty appears to have reversed its previous surgical direction. The national ratio of abdominal to vaginal hysterectomy is 3:1. In some areas and hospitals in the United States that ratio has become 10:1. The decline in the number of surgeons trained in vaginal surgery certainly contributes to the shift toward the abdominal approach. It has been estimated by the Centers for Disease Control that approximately 25% of hysterectomies are performed vaginally. Some vaginal surgeons, myself included, feel that figure is off by a factor of two or three. My own ratio of abdominal/vaginal hysterectomy has evolved over the past 20 years toward the vaginal route with a present ratio of 1:90.

The attitude of patients contemplating or having undergone hysterectomy is frequently expressed by women's magazines, broadcast media, and women's organizations. Their attitude is one of fear toward hysterectomy and the surgeons who perform this operation. These attitudes are contrary to what many vaginal surgeons hear from their patients who have this operation. In fact, many vaginal surgeons have told me that they are deluged with letters from their patients whose personal experience with hysterectomy was extremely positive in the immediate postoperative period as well as in later years. These patients express a genuine concern for other women who are not offered this alternative procedure, and they represent a steady referral source.

Today's practice of medicine dictates that we aggressively foster the understanding and participation of women about decisions impacting on their medical care. In fusing together their wants and needs with our requisite skills, we become increasingly responsible for not only the germane education of our patients but our own on-going education as well. Patients should be actively involved in analyzing the full spectrum of choices, benefits and risks of proposed therapy, including alternative.

Few things characterize modern gynecologic medicine so much as the escalating ability of the American woman, given factual information and choices, to better assess and determine her health needs (and often her family members) in concert with the organized medical/health establishment. She wants (and deserves) a qualified personal physician relationship.

If gynecologic surgeons are not adequately trained in vaginal surgery during their residency, does the specialty risk the potential loss of the surgery that differentiated the gynecologic surgeon from all others? If current trends continue, will we reach a professional consensus that hysterectomy is better performed abdominally? Will we ever be able to measure quality of care provided by either approach through outcome data demanded by so many today? Will we ever know a difference might exist? Will our consensus be made then by default? Will entropy triumph?

Goethe's mot (Maximen und Reflexionen) states "If you truly own something, you can't give it away; even if you throw it out onto the street . . . ." As gynecologic surgeons emphasizing the applicable values of vaginal surgery in practice and teaching, all we can really lay claim to is our time, skill and experience; this is not just alternately passing the contents from one vessel to the other so that one is full while the other is empty. Rather the substance of our knowledge grows through application and propagation or it withers.

In spite of the problems facing residency programs in teaching vaginal surgery, this is not a dying art. Many practicing gynecologists have expressed great interest in postgraduate courses in learning the vaginal approach not adequately taught during residency years. The large numbers of physicians who have attended the First and Second International Conference on Vaginal Surgery attest to that. This conference, committed to depth education in vaginal surgery, was established by practicing gynecologists. Letters from physicians expressing the pleasure that they received from performing more vaginal hysterectomies since attending such conferences demonstrates their desire to learn and expand their use of this operative skill. It should be noted that the physicians reported that their patients also were pleased with the use of vaginal hysterectomy. Perhaps, the specialty should direct more of its efforts toward postgraduate education of vaginal surgery. Presently, the practicing gynecologist seems more interested in providing alternative vaginal surgery to patients than most residency programs.

Consensus brought about by default in not adequately addressing hysterectomy choices, training and practice patterns is a falling tide having lowered all ships; while putting no surgeon at a direct disadvantage, it nonetheless jeopardizes cost-effective quality patient care and places broader-based gynecologic surgery postgraduate training programs in danger of being shattered on the shoals. Failure by physicians and their collective professional organizations to reach a true consensus on medical guidelines or parameters and to enrich attendant vaginal surgical training opens even wider the door for other entities to dictate the components of medical care for physician and patient alike.

Finally, in extremis, vaginal surgery training is being rediscovered. In the meantime, how do we face those patients who have been or might be denied through the inexperience of their gynecologic surgeon the value of vaginal surgery? ■

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GUEST EDITORIAL

by Ira Green, M.D.
Richmond, Virginia

Physicians must keep on top of the dialogue regarding standardization of our profession. We must be vigilant in resisting inappropriate parameters, but be open to possibly good ideas.

Practice Parameters Blues

American medicine is being driven toward considerably greater standardization than is the case today. While the forces responsible for this development are various, by far the most important are the economic realities of contemporary health care.

The Federal Government, assorted third party payors, big business, hospital managers and their trade associations, and yes, even the American Medical Association and most specialty societies — not to mention think-tank health care experts — have climbed aboard the practice parameters express.

There is an emerging consensus that the evaluation of health care must be linked closely to collective "wisdom" as distilled from analysis of presumably objective data derived from the aggregated experience of large numbers of patients. The cry heard throughout the land these days amounts to this: "Find out what works; mandate adherence to standards of care consistent with this knowledge."

It will come as little surprise to regular readers of this column that I am not convinced that those who champion the standardization idol have found the true religion. Count me, at best, as "agnostic" in the clamor for orthodoxy.

Human beings have a remarkable capacity for concluding that whatever they wish to be true either is true, or can be so. The practice parameters movement now underway in health care evaluation circles could demonstrate this phenomenon once again.

Don't get me wrong. I am a strong believer in the importance of medical research and the full dissemination of knowledge as it emerges. My concern is that too many of the advocates of linking medical practice to an analysis of outcomes have an inadequate appreciation of just how hard science can be. The danger is that after years of data accumulation, analysis, panel discussions and assorted agonizing — all undertaken at great expense — there will be conferred upon whatever emerges the mantle of "scientifically established" practice parameters. Whether or not such an appellation is warranted may not matter. Those who want to believe that what emerge are, in fact, legitimate standards may insist on conformity with the "truth" thus established.

Suppose, however, that consensus building is not the surest way to know truth? What then? Ask Copernicus, or Galileo, or Einstein. The danger is that the weight of opinion mustered to enforce the orthodox view will have a chilling effect on innovation. In a worst case scenario, progress could be stultified. Medicine might be changed from an art tutored mightily by science into a malevolent pseudoscience.

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Guest Editorial

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Do I believe that the present fervor for standardization will proceed? It appears certain to do so. What physicians must do, however, is assure that statistics and rules do not supplant informed medical judgment. We must be active participants in the dialogue concerning practice parameters. It is our challenge to assure that what emerges is valid. There must be recognition that in some areas of knowledge we are not at a point where more than the most tentative parameters are appropriate.

The course I propose for physicians is watchful participation in the dialogue regarding standardization. We must be vigilant in resisting inappropriate parameters. It would be foolish, however, to assume prematurely that no good will come of the endeavor. We must embrace what makes sense and shun what does not.

In some respects, the easiest course for physicians would be to practice within the dictates of whatever parameters emerge, even wrong minded ones. But we owe it to our profession and, more importantly, to our patients to do far better than that. Through active involvement in the guideline development process, we can improve the end result. Along the way, perhaps, we can alert policymakers to the danger of investing guidelines with the stature of holy writ! ■

Editor's Note: Ira Green, M.D., is President of the Medical Society of Virginia Review Organization. This President's Message is reprinted with permission from Volume 6, No. 6 (November 1990) of the MSVRO Reports.

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EDITOR'S DESK

by Donald G. Sessions, M.D.
Editor

On Time

"*Dear Dr. Sessions,*

I debated ever writing to you concerning why I was so upset with your office. I decided not to since I had vented my anger to your front desk staff, although their reaction to me was rebuttal rather than conciliation. I even had to ask one woman if she wanted to argue with me or listen! Obviously none of them *listened to what I was saying.* Then I received your letter dated February 10. My first reaction was, "He didn't even get my message. He doesn't even have a clue as to why I walked out." So I decided to write today.

I doubt very seriously if anything will be done because if this has been your policy for years, then it is too ingrained. This is the policy of doctors of many years ago when there was a shortage of doctors in some areas. *BUT IT IS NOT MY POLICY.* Actually there is nothing to be done. There is no way I would ever return to you as a patient. I don't deal with doctors who think their patient's time isn't at least equally important as their own.

Let's go back to my first visit. I don't recall the time of my scheduled appointment, but I do recall waiting outside in your waiting room for one hour and ten minutes before I was led back into one of your examining rooms. I had almost come to the decision to walk out, but I decided not to since this was my first visit and perhaps you had had an emergency in surgery that morning. Once inside the examining room, I waited some time more while you worked your way through the four rooms. (I don't know how long.) I registered a very high blood pressure on that visit, although I didn't equate it to my anger. (I was late for my next business appointment.) It was disappointing that you didn't apologize for being so late for our appointment.

The next time I came for an appointment, I was kept waiting for 45 minutes (I arrived on time as I always do) by the time you actually came in the examining room. I registered high blood pressure that time too, but I still didn't equate it to the wait. I wasn't aware that it was affecting my blood pressure. No mention from you that you regretted my long wait. So I could only assume that you didn't regret it or you didn't even know you were so late. I learned that you only operate on certain days so that can't be the reason your office does not keep appointments. It must be policy to load up the rooms and foyer so you can see more patients.

You told me to come back in a week or so, and I made another appointment. In the meantime, I went to my regular internist and my blood pressure in his office was mildly high but not as bad as it was when I was at your office. Was it associated with your office?

I finally decided that I was

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the one being hurt by my blood pressure, not you. So the only thing to do was not let it bother me so much, or change doctors. It was too late to change.

I arrived at your office at 20 minutes before the hour. My appointment was for 15 minutes before the hour. I promised myself that I would only wait 15 minutes past my appointment and even debated telling the two women at the desk that was my limit. I then told myself not to let it get to me so much. I was the one who was being affected, so I said nothing and went to take my coat off in the foyer waiting room.

As I selected a magazine, another of your clients, a man around 65, made the statement to another man that he had been waiting for Dr. Sessions for 40 minutes. The second man said, "I have been here for 25 minutes for Sessions too." Then the two of them began talking, with a not-so-kind tone, about how they always have to wait for Sessions. I told them I was routinely at least 45 minutes delayed everytime I came here. They all nodded in the waiting room that it was normal to be kept waiting. In fact, everyone commented that they hate to wait.

That did it for me. These two men had been waiting as long as 40 minutes, and they were still out in the foyer waiting room. Should they be lucky enough to be called in the next five minutes then they could be taken to the back area where they could wait longer.

I walked to the front desk and said I was not going to wait for more than 40 minutes. I said it was rude and inconsiderate for me and the other patients who were waiting. It was obvious if those two were waiting so long, I was destined to wait at least 45 minutes also.

Your letter said you understood my need to leave before you could see me. That was not the case. I said I wasn't waiting again for a doctor who thinks so little of his client's time that he consistently is late as a matter of policy.

I probably won't mail this because it is a catharsis just to get it off my chest. The shame of it is that you will probably never know how many more of your patients feel this anger but are too intimidated to say anything. For some reason, many people will take rudeness from their doctor that they would never tolerate from anyone else. WHY?

Now that I have this off my chest, maybe I can get my blood pressure down once and for all.

Former Patient

****

Dear Former Patient:

In answer to your recent letter, let me begin by acknowledging what I liked about it. I really liked the quality of the type. Your laser printer really makes it easy to read.

Very Sincerely Yours,
Donald G. Sessions, M.D.

Dear Former Patient:

Thank you for your recent letter. I apologize for not being on time for our appointments. I am pleased that the condition for which you saw me was benign. I am enclosing a copy of the pathology report for your records. I will be happy to forward your records to your physician if you so request.

Very Sincerely Yours,
Donald G. Sessions, M.D.

Dear Former Patient:

I was shocked and devastated by your letter. It is NOT my policy to keep patients waiting. There is no excuse for this. In fact, I cannot stand to be kept waiting myself.

My entire staff has been terminated, and I am considering giving up the practice of medicine. It hasn't been all that much fun lately anyway. This was the last straw.

I can't thank you enough for making me face the truth.

Very Sincerely Yours,
Donald G. Sessions, M.D.

Dear Former Patient:

Enclosed is reimbursement for all the fees that you have paid for my service in regard to your recent medical condition. I could never accept payment for services that were performed in an environment in which I was so consistently late. If you feel that you should be further reimbursed for your time, please don't hesitate to contact me.

Very Sincerely Yours,
Donald G. Sessions, M.D.

Dear Former Patient:

I appreciate the time you took to write the two-page, single-spaced letter regarding my being consistently late to our appointments. I apologize to you not only for being late, but also for having a schedule that doesn't work. The issue of doctors' schedules is complicated. It is more than a simple problem of arrogance and patient dignity. Ongoing questions include:

How many patients should be seen over a given time period?

How long does it take to see one patient?

What can be done when there is a legitimate reason for the doctor to be late?

What can be done to work in patients who are genuinely ill?

What about emergencies?

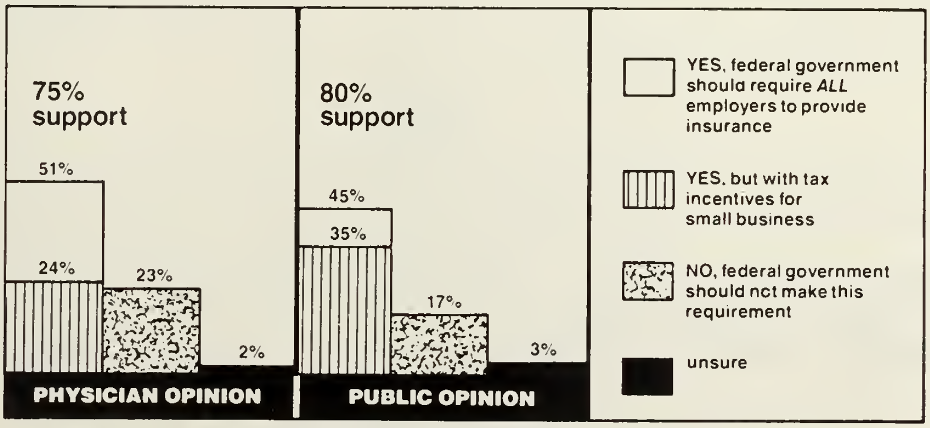
What about patients whose examination turns up a condition that results in the appointment taking much longer than expected?

I would like you to know that I am acutely aware of these issues. Doctors do not go out of their way to alienate patients. I have taken courses in scheduling and time management. We frequently discuss and update our scheduling procedures in an attempt to improve them. Your letter has stimulated another look at our current procedures. I am sure that you are aware that we are in a critical period regarding the allocation of resources for medical care in this country. My view is that seeing patients "on time" will continue to be a major issue for doctors and patients. Certainly, my schedule for seeing patients is unsatisfactory as far as my ability to be on time for everyone. I promise to work on that.

I also want you to know that I understand the issue under the issue of my being late which you have so eloquently described. This is the issue of **TRUST**. When an appointment is made, it is a promise that involves a degree of trust that it will be kept. When this does not occur, then there is a sense of betrayal. Interestingly, this is not just a doctor-patient issue. It involves personal, family, community, cultural, national and planetary relationships. It seems so simple. All we have to do to create and maintain trust is to make promises and keep them. But we know that as human beings we sometimes make promises that we cannot keep. Sometimes just the acknowledgement that "I am late and I am sorry" (since I had promised to see you at a specific time by appointment and I was unable to do that), can help us to handle the situation. This was missing in our relationship, and for this I am truly sorry.

In closing, I would like to point out that some of the people in the waiting room see the time situation in a different way. Instead of rudeness and inconsideration they see someone who cares for them as special people, who works them into the schedule when they are ill, even when there are no openings, and usually sees them in time, if not on time.

Very Sincerely Yours,
Donald G. Sessions, M.D.



AMERICANS SUPPORT REQUIRED COVERAGE

Doctors and patients agree that employers should be required by law to provide basic health care coverage.
Sources: Dec. '89 Gallup Survey/Physicians Jan. '90 Gallup Survey/Public

A message from The American Medical Association for the Health Access America Proposal

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Letters to the Editor

Response to "Advice"

Dear Dr. Sessions:

I was quite surprised to read the March Editor's Desk titled "Advice to A Young Doctor," written by Wilfred Wooldridge, M.D.

I found the article to go against the grain of just about everything that has been written concerning medicine and the business side of medicine for the past 30 years. I thought it didn't even come close to the attitude of a large number of doctors who I have been associated with for the past 30 years and wondered why your journal would publish such a negative article.

I want to point out a number of discrepancies in the article.

I am sure that the good doctor would find that the best and the brightest young college graduates, most with MBAs from the top eastern schools, have been snatched up by the financial institutions in New York City. A good share of these young people will end up earning $500,000 plus after 20 years in their chosen profession, which in many cases is with a brokerage firm. A recent article in *Fortune* magazine pointed out that the average earnings of a Harvard class was in excess of $600,000, 20 years after graduation. They did not choose to become Rhodes scholars but decided to go into business. Many of these graduates could have qualified for the Rhodes scholarship if they had taken the proper undergraduate courses.

I have found, like many others, that our clients are not at all prepared to try and invest or determine what should be done with the money they have earned. What they need is a bright person who will help them make these decisions. From the brokers standpoint, clients have to be willing to accept a reasonable return on their investments and not expect an unreasonable return. Our clients have learned that great returns mean great risk. The inability to find qualified people to assist doctors has put them on the top of the sucker list of every fly-by-night con man in the country.

I was also surprised by the paragraph concerning the cleaning out of all personnel every 10 years. We have hired many young women into our clients' offices, at usually below substandard wages, under working conditions unlike any other job, long hours, no lunch, Saturday hours, no particular quitting time, vacations only when they coincide with the doctor's vacation and not with their husband's vacation, no employee benefits, and no retirement plan. Generally, these women work for someone who cares very little about them. They have been taken advantage of almost every day since they came to work in the doctor's office. I have never seen an employee of an office make a sexual advancement toward the doctor, but I have seen many doctors get out of line with their employees.

We seldom hire anyone with a college degree into an office. The starting wages for a person with a degree are more than the wages we pay after 10 years of work in the office.

It seems to me that this article presents to the young doctor the wrong approach. Medicine today is not the egotistical doctor and a bunch of peons. It is a team approach and the doctor relies on other members of the team to give their input to the total picture of medical care. Each member has something to offer and should be considered an individual and a valuable member of the team.

Doctors who consider all others, whether they be lawyers, stock brokers, insurance agents, accountants, nurses, nurses aids, or secretaries as substandard persons and just someone trying to take advantage of the doctor are quite a bit out of step with the world today.

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PRESIDENT'S PAGE

by
Dorothy D. Reister, M.D.
MSMA President

Physicians: The season of vacations, camp, and school check-up time has arrived and along with it the need to review the status of your patients' immunizations

Immunization Review

As your new President of the Missouri State Medical Association, I want to thank you for the honor and privilege of this office. Please know that I am available to every one of you, and I hope that you will feel free to write or call me if there is anything I can do for you or with you on anything that concerns you. Remember that the Missouri State Medical Association is **YOUR** organization. We have had a great year with Dr. Gary Dyer's leadership and hopefully another good year on the way. Remember the goals of increased and documented free care that he had; he has passed that ball to me along with others. This year the President's Page will address a somewhat different series of information, aims and hopefully, achievements. One of these is increasing membership and participation by physicians throughout the state, but I will go into greater detail next month.

This is a season of vacations, camp, and school check-ups. There are somewhat different needs in each group, so let's first consider the adults going on vacations, sometimes to exotic areas. Do your adult patients get a tetanus booster every 10 years? Think about it. If they are traveling outside the country, they will need adequate immunization for specific areas. Some areas even require a meningococcal meningitis vaccine! Accurate information should be given and prophylactic medications prescribed for "traveler's trots" and malaria and other endemic diseases. If there is any question about the adequacy of these and requirements of specific areas, the United States Public Health Service or any infectious disease specialist is an excellent source of information.

Children going to camp will be in for their camp physicals. It is hoped that these are thorough physical examinations, since this age group may not be in for routine physicals as often as they were in infancy. Again it is a chance to **check all immunizations**, and catch up any that have been missed. The only one specifically requested on most camp forms is the tetanus immunization date, but the others should also be current. As the physician is evaluating the child and the form, he can also be sure about the MMR immunization. This year the need for the MMR booster has finally caught the eye of the health departments and schools. Currently, if no MMR booster has been given,it should be and it can be given at the same time as any other immunization. We all know about the outbreaks of measles in Missouri as well as other places throughout the nation, and we have a means of prevention in our hands.

For the children just entering school, the plan is very specific now in Misouri. They should have had five DPT, four oral polio, HIB vaccine, MMR at 15 months of age and MMR booster upon entering school. Tuberculin skin test should also be done at this time; as you know, we are seeing an increase in the incidence of tuberculosis and the skin test is an excellent screening tool, since we do not routinely give BCG vaccine in

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President's Page

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this country. However, if you treat children who have come from foreign countries, with parents or adopted, and particularly from Asia and Central America, they may have been given BCG vaccine and, of course, will have a positive tuberculin skin test.

We cannot discuss immunizations without updating the current state of HIB vaccine. Late in 1990, the FDA approved the Hibtiter vaccine for age two, four, and six-month infants, given at the same time as the DPT and Polio. Since the Hemophilus influenza disease of infancy is serious and life-threatening, it is a great addition to our strategy of well-child care to have the vaccine. If the child starts his Hibtiter at age seven to 11 months, he should have two injections two months apart, and all of the infants should have a booster of the same type of vaccine at 15 months. If a child has not had HIB vaccine and is between the ages of 15 and 60 months, he should receive it. And, of course, if a child contracts a proven HIB infection, he should be immunized after recovery; the disease itself does not confer immunity.

So now we can review immunization status on all of our patients. By the way, doctor, **ARE YOUR OWN IMMUNIZATIONS CURRENT?**

President's Puzzle

This year I promised puzzles.

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AUXILIARY MESSAGE

by Valerie A. Peters
MSMAA Liaison

The 1991-92 MSMA Auxiliary is in good hands for the coming year. Meet the 1991-92 MSMA Auxiliary President, Mary Hunkeler, a member of the Metropolitan Medical Society of Greater Kansas City Auxiliary.

1991-1992 Auxiliary President, Mary Hunkeler

Organized. Involved. Energetic. If you had to choose three words to describe the 1991-92 MSMA Auxiliary President, those might be your choices.

While Mary Hunkeler takes the reins of the MSMA Auxiliary this year, she is actively soliciting the help and support of all MSMA and MSMA Auxiliary members to help carry on the work of her predecessors, including immediate past-president, Carol Sparkman. The MSMA Auxiliary has set important goals for its organization and a team effort can make reaching those goals much easier.

Mary and her husband, John, an ophthalmologist in private practice in Kansas City live in Shawnee Mission, Kansas. They have one daughter, Amy, a senior at Harvard College. They also lay claim to a dog, Shelly, and two cats who answer to Molly and Lizzie.

Mary graduated from the University of Kansas in 1964 with a Bachelor of Science degree in Nursing. She was a staff nurse in the operating room at the University of Kansas Medical Center in Kansas City, Kansas from 1964-1967. It was in the operating that she met her future husband.

Her initial involvement in organized medicine began in 1973 when she joined the Metropolitan Medical Society Auxiliary. At that time, it was still known as the Jackson County Medical Society Auxiliary. She wasted little time getting involved, serving as president of the society auxiliary in 1979-80. Posts she held within the state auxiliary included: Seventh District Director, Convention Co-Chairman, Recording Secretary, President-Elect and Vice President-Legislation.

Mary's list of community service involvements shows just how much dedication your new Auxiliary President has to offer the Association. She is active in the American Red Cross, Greater Kansas City Chapter, serving presently as Vice-Chairman on the Executive Committee. She also serves on the Executive Committee of the American Royal Association, which has historical significance as she is the first woman to be appointed to the Executive Committee in 93 years. She served as President of the Junior League of Kansas City, Mo., Inc. from 1985-86 and remains active in the League.

At Children's Mercy Hospital, Mary serves as a Central Gov-

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Auxiliary Message

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erning Board member. In 1987-88, Mary served as chairman of the Children's Mercy Golf Classic that raised approximately $350,000. This golf tournament raises more money than any other single-day charitable sports event in the nation.

Among other groups who have benefitted from her active involvement are the University of Kansas School of Nursing Advisory Group, and the Crippled Children's Nursery School Managing Board (past chairman). She is also President of the Family Study Center at the University of Missouri-Kansas City. Mary Kay McPhee is a past president of the Study Center. Currently, Mary serves as chairman of the March of Dimes Gourmet Gala for 1992. At the Second Presbyterian Church in Kansas City, Mary has served as an Elder since 1988.

Several deserved honors have come Mary's way due to her dedication. Among them: Kansas City Tomorrow, Class XII, Avila College Women's Leadership Institute, Session XI, The Foundation-Alumni Association of the Metropolitan Community and Junior Colleges Distinguished Alumna-of-the Year Award (1986), and The Jean M. Duensing Journalism Award (1990).

It comes as no surprise that Mary finds herself now in the position of President of MSMA Auxiliary. She has dedicated herself to the organization through various chairmanships and positions and is now ready to face the challenge of leading the members of the Auxiliary into the next year.

Mary stresses that MSMA Auxilians are making their presence known at the AMA Auxiliary level. Chris Bohigian has been nominated treasurer of the AMA Auxiliary for 1991-92, Sandy Mitchell has been re-appointed Legislative Committee Chairman for 1991-92 and Mary has been appointed as an ad hoc member of Long Range Planning for 1991-92.

Medicine faces increasing pressures from outside forces and Mary is keenly aware of the positive effects the Auxiliary can have on the profession's public reputation. Be assured – 1991-92 MSMA Auxiliary President Mary Hunkler is not a follower – she is a leader and ready to lead. ■

Photo credit: Portrait by Wakefield.

FYI

The average employer spends $2,300-$2,600 per employee for health insurance premiums.

A message from The American Medical Association for the Health Access America Proposal

Lady Killer

Among many young women, smoking is viewed as stylish.
It is not. Smoking is deadly.
If you smoke, please consider stopping. For help, information and support, please contact your local American Cancer Society.

AMERICAN CANCER SOCIETY®

PRACTICE MANAGEMENT

by Janice K. Woerth, Ph.D.

Do you have a question for Dr. Woerth? Include your questions along with your name, address and phone number and send them to:

Janice K. Woerth, Ph.D.
Practice Management
c/o *Missouri Medicine*
P.O. Box 1028
Jefferson City, MO 65102
Or call her direct:
202/363-1780

Although your name will not be used in the journal, please include your name and phone number so that Dr. Woerth may contact you if she needs additional information to answer your question.

Dear Dr. Woerth:

I understand that Medicare will be implementing a new fee schedule in 1992 called the RBRVS. Can you tell me what this is all about?

Dr. K.B.

Dear Dr. K.B.:

RBRVS stands for resource based relative value scale. The relative value scale (RVS) that will be adapted in 1992 for Medicare was developed by Harvard Medical School. The RVS is made up of three components: the physician's work involved in completing the service or procedure, the overhead costs associated with the service or procedure, and professional liability insurance cost (malpractice insurance). From this scale, a relative value unit (RVU) was established for each service and procedure listed in the CPT book. To derive the new fee for a service or procedure, the RVU will be multiplied by a geographic adjustment factor and a conversion factor (the dollar amount). The derived fee for each procedure will replace Medicare's "allowable fee." The "allowable fee" is the amount Medicare pays for a service or procedure. (Remember that Medicare pays 80% of the "allowable fee" and the patient is to pay the remaining 20%.)

The RBRVS will be phased in over a five-year period starting in 1992. According to Congressional law, the RBRVS must be fully implemented by 1996. Congress has yet to release the conversion factor although many of the RVUs for services and procedures have been published.

It has been reported that the implementation of the RBRVS will eliminate the variation in reimbursement by specialty for a specific service or procedure. For example, Medicare's reimbursement in a geographic area for a limited office visit will be the same regardless of the physician's specialty. One wonders how this can be achieved given that the cost of malpractice insurance and overhead tends to vary considerably by specialty. I believe this may be a "bug" in the system that will have to be addressed.

Dear Dr. Woerth:

We are an orthopedic practice and consequently treat many fractures. Are we allowed to charge separately for applying a cast?

S.S.

Dear S.S.:

The codes for casts and strapping (29000-29590) are to be used when a cast is being replaced during or after the period of follow-up care. (See the note on page 201 of the 1991 CPT book.) The cost of the initial cast is included in the fee for the procedure for treating a fracture. If a cast is applied when no fracture is present, like in the case of a sprained ankle, you are to code for the appropriate level of office visit in addition to the code 99070 for the casting supplies.

To charge a separate fee for the initial casting when treating a fracture is considered "unbundling" of the procedure. It is illegal to unbundle procedures for Medicare/Medicaid patients. Unbundled procedures are subject to reimbursement denials, fines and/or sanctions. ■

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SPECIAL ARTICLE

"Black Marks on Your Soul"[1] – The National Practitioner Data Bank

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In 1986, Congress mandated establishment of a National Practitioner Data Bank. The goal was to improve the quality of medical care by creating an environment to weed out impaired or incompetent physicians. The authors discuss the effects of the Bank since it became operational on September 1, 1990.

The Health Care Quality Improvement Act of 1986[2] (P.L. 99-660) was signed into law November 18, 1986.

The Act mandated development of a National Practitioner Data Bank (NPDB) as a repository for adverse information on physicians and other health care practitioners. The Department of Health and Human Services (HHS) published proposed regulations in March of 1988. Final regulations implementing the Data Bank sections of the statute were published in October of 1989.[3] The Data Bank began operation on September 1, 1990.

The purpose of the statute was to restrict the ability of incompetent physicians to move from state to state without disclosure or discovery of any previous damaging or incompetent performance.[4] The overall goal was to improve the quality of medical care by creating an environment in which impaired or incompetent health care practitioners could be weeded out of the population.[5]

The statute sets forth three general areas for which information must be reported to the Data Bank.[6] They are as follows:

1. Payments made on behalf of health care practitioners for medical malpractice suits or claims;
2. Adverse licensure actions taken by state licensing boards; and
3. Adverse actions taken against health care practitioners relating to clinical privileges.

All provisions of the Act are applicable to physicians and dentists. Reporting of limitations on privileges is voluntary for various allied health care practitioners who hold clinical privileges. Allied health care practitioners must report medical malpractice payments. The Act does not apply to licensure actions for allied health practitioners.

Reporting Medical Malpractice Payments

The statute and regulations require that any person or entity who makes a payment under an insurance policy, self insurance, or otherwise for the benefit of a physician, dentist, or other health care practitioner, in settlement of, or in satisfaction of, a claim or judgment, report such payment to the Data Bank. The regulations require that any medical malpractice payment, regardless of size, be reported to the bank. In most instances, this report will be made by the medical malpractice insurer. Note that reportings are mandatory whether a lawsuit is filed or whether payment is made prior to the time of filing suit. Payments made to settle both claims and lawsuits must be reported. Further, each individual or organization making payment must report separately to the Data Bank. For example, in a medical malpractice action involving a certified nurse anesthetist where the damages may be several million dollars, a settlement might mean the primary insurance company and an excess carrier both make payments in settlement of the claims. In this situation, two separate, distinct reports would be made to the Data Bank. One report would not suffice.

Interestingly enough, the Department of Health and Human Services has taken the position in its final regulations that a claim or lawsuit which is settled by waiver of an outstanding bill is not a reportable payment.[7]

The HCQIA provided that the National Data Bank be operative on November 14, 1987.[8] For a number of reasons, this did not occur. The Department of Health and Human Services has decided that retroactive reporting of malpractice claims, licensure actions, or privilege matters to the Data Bank will not be required.[9]

Adverse Licensure Actions

The HCQIA also specifically requires state licensing organizations for physicians and dentists to report revocation, suspension, or restriction of a physician's license to the Data Bank.[10] Also, censures, reprimands, or probation which relate to the physician's professional competence or conduct must be reported.[11] Additionally, a physician who surrenders his license while under investigation of conduct that might result in disciplinary action must also be reported to the Data Bank.[12]

Interestingly, those responsible for administering the Data Bank have taken the position that surrender of a physician's license temporarily for entrance into a drug, alcohol, or psychiatric rehabilitation program for 30 days or more is not a reportable event. The theory is that surrender of license in this setting is not related to professional competency or conduct.

Currently, licensing authorities are not required to report adverse action taken against allied health care professionals. An amendment to the act passed in 1987 does extend the reporting requirements of adverse licensure action to allied health care professionals.[13] Rules implementing the amendment have yet to be published.

Reports Regarding Clinical Privileges

Hospitals are required to report restrictions or limitations of a physician's clinical privileges within 15 days of "final action" by the institution's governing board.[14] This reporting is voluntary for allied health care practitioners[15] and goes to the state licensing board. The board must forward the information to the National Practitioner Data Bank within 15 days. The limitation on privileges must last more than 30 days. Reportable limitations include reducing, restricting, suspending, revoking, or denying clinical privileges or membership on the medical staff of a health care entity. A voluntary surrender of clinical privileges that occurs during the course of an investigation for incompetence or unprofessional conduct must also be reported.[16]

Changes in a practitioner's clinical privileges that are unrelated to professional conduct or competence are not required to be reported. For example, the suspension of privileges for failure to promptly complete medical records, for being disruptive, or failing to attend the sufficient number of medical staff meetings are not to be reported.

A reduction in privileges that is implemented because of concerns regarding competence or conduct must be reported. For example, if a practitioner surrenders his privileges to deliver infants because of concern about ability to read fetal heart monitor strips, this would be reportable. If the physician voluntarily surrenders privileges because of concerns over high liability exposure or out of economic concerns, this would not be reportable.

Access to the Data Bank

The original HCQIA envisioned widespread access to the Data Bank. The organized medical community feared the Data Bank would be used by plaintiffs' attorneys in medical cases or by the public to investigate their personal physicians. The American Medical Association and other medical organizations were successful in having the act amended in 1987, greatly limiting access to the Data Bank.[17] The information is not available to patients or to the public. The information is available to plaintiffs' attorneys in medical malpractice actions only in very limited circumstances.

The statute does require hospitals to request information from the Data Bank when a physician, dentist, or other health care practitioner applies for a position on the medical staff or for clinical privileges. Further, hospitals are required by the statute to request information from the Data Bank every two years on each licensed health care practitioner who is a member of the medical staff or who holds privileges.[18] Therefore, the regulations require hospitals to request information for physicians, dentists, and allied professionals including podiatrists, psychologists, chiropractors, nurse practitioners, nurse midwives, nurse anesthetists and other licensed or certified practitioners who may have privileges.[19]

A hospital's failure to request information as required by the act results in a presumption that the hospital was aware of adverse information that could have been obtained from the Data Bank.[20] A plaintiff's attorney, therefore, may present evidence on a corporate negligence theory against a hospital for failing to investigate the credentials of the health care practitioners who hold privileges.

Physicians, dentists, or other health care practitioners have an absolute right to receive their own Data Bank files.[21] There is no charge to health care practitioners requesting their own files.

State licensure agencies also have free access to the Data Bank. Health maintenance organizations, clinics, or any organizations that might employ or grant privileges to a physician also have access to the information filed with the Data Bank. There will be a charge for obtaining reports from the Data Bank.

It is extremely difficult for a plaintiff's attorney to obtain information from the Data Bank. Initially, the plaintiff must provide evidence that a medical malpractice action has been filed against a hospital and a health care practitioner, both of whom must be named in the action. Further, the attorney must provide evidence that the hospital failed to obtain information from the Data Bank as mandated by the act. The use of the information is restricted solely to litigation resulting from the alleged corporate negligence of the hospital.[22] The information cannot be used against the health care practitioners.

Penalties Under the Act

The statute and implementing rules and regulations provide for civil monetary penalties of up to $10,000 for a breach of the confidentiality provisions of the Data Bank.[23] Further, civil monetary penalties can be imposed for failure to report medical malpractice payments. State licensing boards that fail to comply with the provisions of the act may find the Department of Health and Human Services designating a different entity within that state to receive reports. Hospitals that fail to comply with the reporting requirements may lose their immunity protections for peer review for a period of up to three years.[24]

Disputing Data

A health care practitioner covered by the Data Bank is given specific authority to dispute the accuracy of information filed with the Bank.[25] The aggrieved health care provider must notify the Department of Health and Human Services and the reporting agency in writing of the disagreement. Further, the practitioner must ask the reporting agency to correct the information. If the reporting agency refuses, then the Department of Health and Human Services will investigate the discrepancy and attempt to resolve it. If the information turns out to be incorrect, new reports will be sent to all individuals who have sent inquiries to the Data Bank. If the Department of Health and Human Services finds that the report filed by the reporting agency was accurate, they will simply note in the file that the practitioner filed the dispute.

Comments and Conclusions

It is too early to judge the impact of the Data Bank. It has generated conflict between insurance carriers who desire to settle claims for financial motives and physicians who believe that cases ought to be tried. Physicians will need to press for jury trials, rather than pay "nuisance value" settlements. Reporting requirements have made it more difficult to resolve credentialing and disciplinary actions. Physicians fear that if they accept limitations on privileges at one institution, a report to the Data Bank will trigger credentialing reviews at all other hospitals. Physicians are now reluctant to accept "plea bargains" in disputes with licensing agencies. We are all working hard to avoid "black marks on our souls."

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1. The title was borrowed, with permission, from a presentation on the Data Bank given by Elizabeth Gallup, M.D., J.D., FCLM, Associate Legal Counsel to the American Academy of Family Physicians.
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Reprints

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Duplication of the Colon: A Case Report

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Colonic duplication is a rare anomaly. The authors present a case of duplication in an adult to introduce a brief discussion of the embryology, classification, symptoms and radiology of the condition.

Colonic duplication is a rare congenital anomaly with a 2:1 female to male predominance. Duplications are generally discovered in childhood when symptoms due to bleeding or distention of the duplication arise. Asymptomatic duplications usually remain undiscovered, found only incidentally.[1,2] We report one such case.

Case Report

A 71-year-old white man had been routinely observed for many years, his only gastrointestinal complaint being mild constipation. In May of 1990, he complained of increasing constipation and an intermittent feeling of fullness in the left mid-portion of his abdomen. Tests for blood in the stool and results from sigmoidoscopy were negative. A barium enema examination was unremarkable with the exception of a few sigmoid diverticula to the level of the hepatic flexure. The flexure was redundant, and the head of the barium column was lost when the duplicate colon began to fill rapidly. The ascending colon and cecum proceeded to fill normally. Our initial impression was of an extravasation or fistula, but after evaluation of the origin, mucosa, and distal end of the segment, this idea was not supported.

The duplication had a wide, smooth opening into the true lumen at its proximal end. The duplicated lumen was relatively smooth, and almost the same caliber as the true lumen. There was no evidence of mass effect on the true lumen. The duplication was empty of feces except at its most distal portion. The duplication paralleled the true lumen superiorly along the transverse colon, medially along the descending colon, and terminated at the level of the mid-descending colon. Its total length was 60 cm. On the post-evacuation film, the duplication was almost completely emptied. This probably accounts for the patient's many years without symptoms. Based on the lack of evidence of urogenital duplication, this was classified as a Type I,c,1 (limited to alimentary tract, double-barreled communicating, limited to colon) duplication.

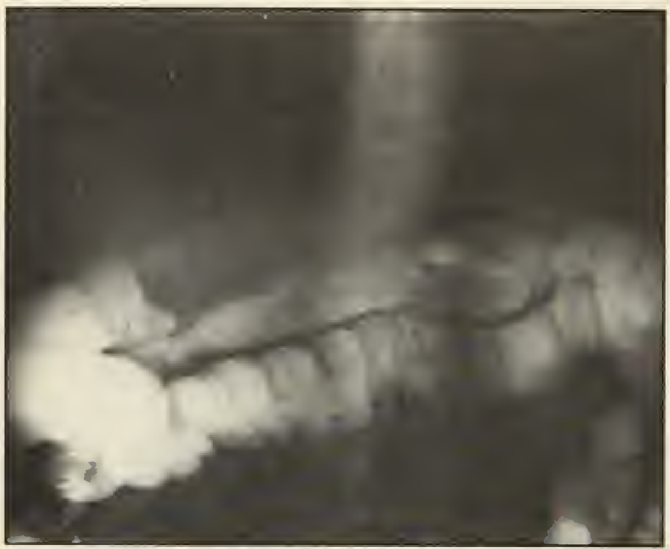

Figure 1. Filled film demonstrating the duplication lying on the mesinteric side of the transverse and descending colon. The duplication lumen is relatively smooth with no mass effect demonstrated.

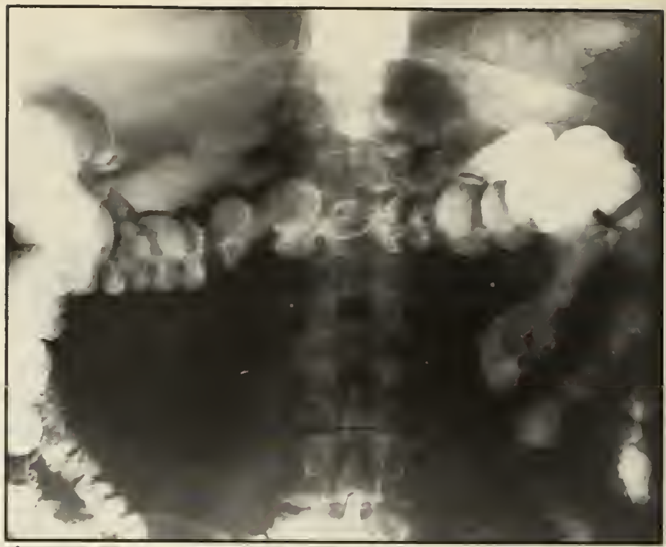

Figure 2. Post-evacuation film better shows the distal end of the duplication. Note the relatively complete emptying of the duplication and the filling defect at its distal end.

Discussion

The most widely accepted theory (Bremer) for the pathogenesis of intestinal duplication is based on embryology. In the 6-to-7-week embryo, the gut is a solid mass of cells. As the bowel lengthens, vacuoles appear and then coalesce into a single lumen. If one or more of these vacuoles fail to unite with the developing true lumen, a duplication results.[3] This theory accounts for the fact that duplications contain all of the normal tissue layers. The theory also accounts for the reported cases of triplication of the intestine, as well as cases of duplication of the urogenital structures. If the duplication occurs prior to the differentiation of the hind gut anlage, the urogenital structures are also duplicated.[1]

The duplicate colon lies adjacent to, and on any side of the true lumen. The duplication may communicate with the colon one or more times. Proximal communications without distal communication may empty poorly, causing gastrointestinal symptoms. Noncommunicating lesions enlarge due to accumulation of intestinal secretions. The duplication may contain any type of mucosa, and if gastric mucosa is present, bleeding can occur.

Drs. Kottra and Dodds have developed a classification system in which there are two major categories each divided into three sub-groups. Type I duplications are limited to the alimentary tract and are frequently asymptomatic. These can be (a) spherical; (b) tubular; (c) double-barreled, communicating with the colon and (c,1) limited to colon or (c,2) with associated ileal duplication; (d) loop duplication with separate mesentery and blood supply; or (e) multiple duplications in any combination. Type II duplications are usually double-barreled and are almost always associated with duplication of the urinary or genital tracts. Other gastrointestinal anomalies and various bony anomalies are also associated with Type II duplications. These types of duplications are frequently symptomatic. Major subcategories of Type II duplications are: (a) with two separate perineal ani, (b) with fistulas from the distal portion of a duplicate to another hollow viscus, and (c) with imperforate anus.[2]

Clinical symptoms of duplications vary somewhat depending upon the type. Type II duplications are generally discovered early, since the urogenital anomalies are often readily apparent. Type IIb and c duplications often result in urinary tract infection, fecaluria, or fecal incontinence. Type IIa duplications are asymptomatic unless other duplications are present. If the duplication is Type Ia or b there may be enlargement due to internal secretions, and symptoms can occur due to compression of adjacent viscera. A distended duplication pressing on the bowel wall could easily be confused with a cancer or project into a loop and cause intussusception.[1] Ischemia can occur when mesenteric vessels are stretched around a distended duplication. Blind loop syndrome can occur, and massive engorgement of a duplication

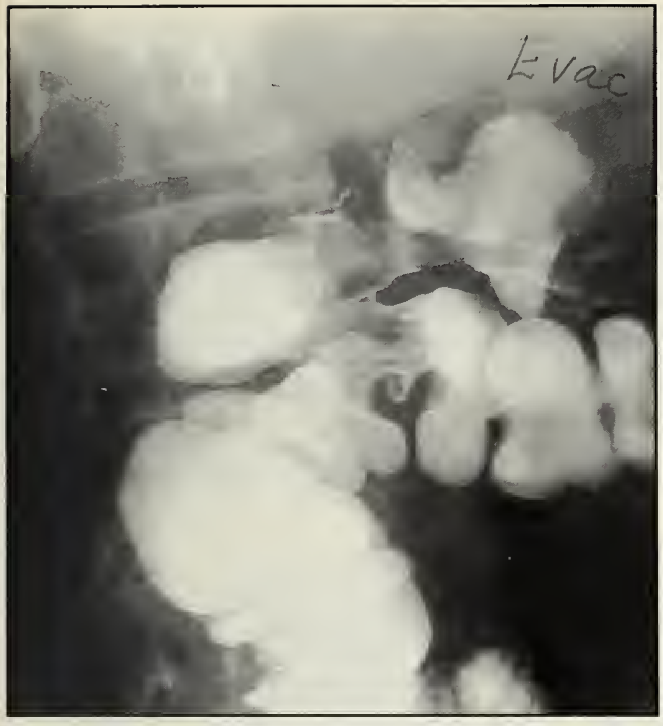

Figure 3. Post-evacuation spot film of the communication of the duplicated and true lumens. Hepatic flexure is below. Note the wide opening between the two lumens.

can cause obstruction of adjacent bowel. The most common symptoms are obstruction, pain, constipation, distension or a palpable mass.[1,2]

Radiographic diagnosis is made primarily by barium enema, although if there is an associated ileal duplication with only a proximal opening, a small bowel series may be the best way to demonstrate the lesion. The diagnosis may also be made by identifying an air-filled structure or soft tissue mass paralleling the bowel and lying close to it. Barium enema examination may show bowel that appears compressed, displaced or flattened by the duplication. If the duplication fills with barium, the lumen is often irregular, and if gastric mucosa is present, ulceration may be seen. Cancer can occur in duplications, and may be difficult to detect because of the distorted anatomy, incomplete filling, or retained fecal material in blind pouches. Complete evaluation also requires study of the urogenital tract, lumbar spine and pelvis. If surgery is necessary, angiography is needed to evaluate the mesenteric blood supply.[1,2]

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Bilateral Angiomyolipomas: The Benefits and Limitation of Embolization for Renal Salvage

A Case Report

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The authors discuss the treatment options for bilateral angiomyolipomas and present their views on the benefits and limitations of embolization.

Embolization has been advocated as the treatment of choice for patients with angiomyolipomas that are actively bleeding.[1-2] The role, effectiveness, and limitations of embolization are described in our case report of a patient with huge bilateral angiomyolipomas at the University of Missouri.

Case Report

A 27-year-old white man with tuberous sclerosis came to the University of Missouri with gross hematuria. He had stable vital signs and tender masses in both flanks. A computed tomographic scan showed bilateral renal tumors with areas of fat density consistent with angiomyolipoma (Fig 1A). The serum creatinine level was 1.0. Arteriography revealed multiple terminal aneurysms with a whorled "onion peel" appearance. Contrast medium extravasated from bleeding interlobar artery directly into the right renal collecting system (Fig 1B). The bleeding artery was selectively catheterized and embolized using Gelfoam. The interlobar artery was completely occluded and the bleeding stopped (Fig 1C). The following day, his urine was clear and his serum creatinine unchanged.

Four weeks later, the patient returned with massive hemorrhage and an enlarging mass in his left flank. Cystoscopy revealed active bleeding from his left ureteral orifice. Emergent arteriography showed a lower pole renal artery giving rise to a large tortuous vessel with multiple aneurys-

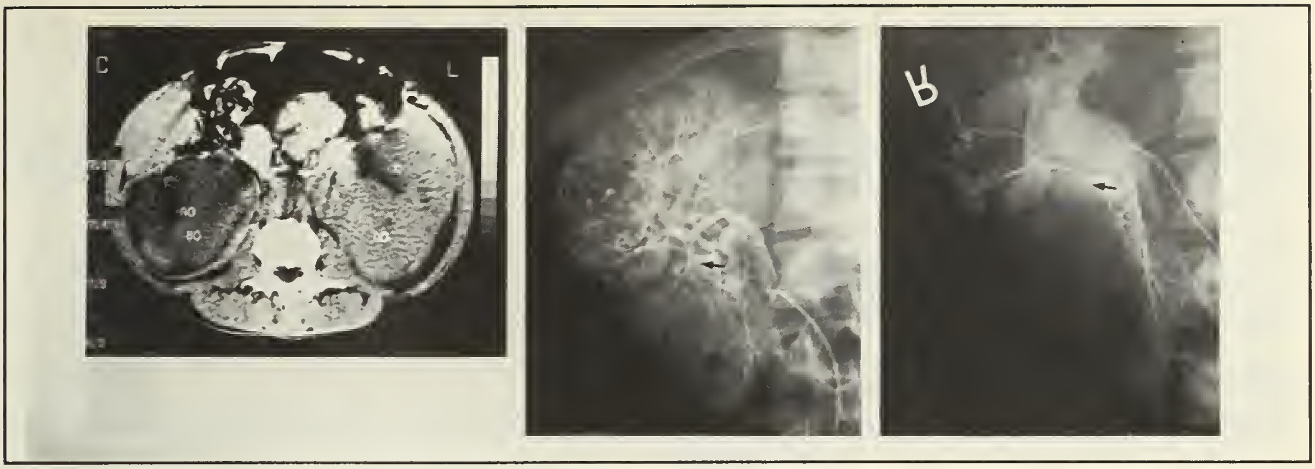

Figure 1A. Bilateral large angiomyolipomas with areas of fat density. **Figure 1B.** Extravasation of contrast from bleeding interlobar artery. **Figure 1C.** Complete occlusion of the interlobar artery.

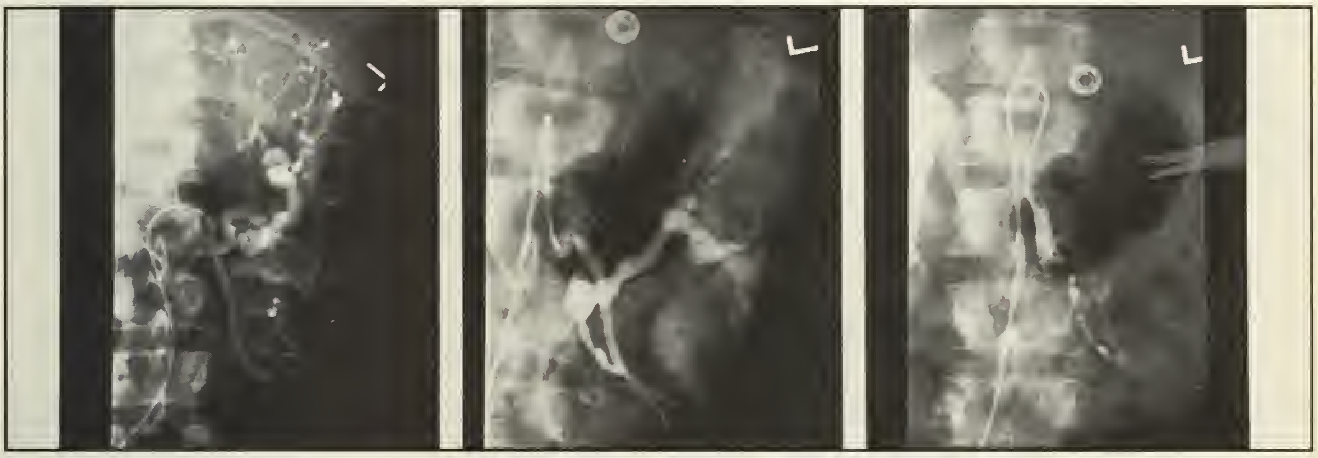

Figure 2A. Large tortuous renal artery with multiple large aneurysmal dilations. **Figure 2B.** Ruptured vessel wall aneurysm with massive extravasation of contrast. **Figure 2C.** Occlusion of renal bleeding artery aneurysm with three steel Gianturco coils.

mal dilations (Fig 2A). A large amount of contrast extravasated from a ruptured vessel wall aneurysm into a huge retroperitoneal fluid collection (Fig 2B). Due to the tortuosity of the bleeding vessel, selective embolization was not feasible. Placement of Gelfoam pledgets into this lower pole renal vessel had no effect, simply bypassing the point of aneurysmal rupture. However, when three steel Gianturco coils (5mm and 8mm) were placed in the orifice of the artery, the bleeding drastically slowed, albeit at the expense of partial renal infarction (Fig 2C). The patient immediately stabilized and, other than having fever and flank discomfort, did well.

Five days following embolization, he underwent an elective left nephrectomy. The kidney was large, measuring 30 X 17 X 11 cm and weighing 8 lbs.

Comment

While angiomyolipomas are benign, they may coexist with, or be confused with renal cell carcinoma.[3] In this case, computed tomography imaging is helpful, and has led to a more rational management of such patients.[4] In our case, selective embolization resulted in rapid hemostasis and saved the right kidney. This was important because major hemorrhage from the contralateral kidney subsequently occurred, and the bleeding vessel could not be selectively catheterized. The patient eventually required nephrectomy.

In this case, embolization provided an alternative to the possibility of bilateral nephrectomy. In the 12 months since the patient's operation, there has been no recurrent bleeding from the remaining kidney.

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1 - 3 Protection for Research Risk — Location: The Hyatt Regency, Union Station, St. Louis, MO. Contact: Cathy Caruso, CME Office, Washington University School of Medicine, 660 S. Euclid, Box 8063, St. Louis, MO 63110. 1-800-325-9862 or 314/362-6893.

2 - 3 Current Management in Critical Care — Location: Allis Plaza Hotel, Kansas City, MO. Contact: Linda F. Smutz, Kansas City Southwest Clinical, 7920 Ward Parkway, Suite 205, Kansas City, MO 64114. 816/523-3383.

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8 - 10 Pediatric Advanced Cardiac & Trauma Support for Life and Pediatric Advanced Life Support Course (PACTS/PALS) — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University Medical Center, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63140-1083. 1-800-533-2712.

10 - 11 31st Annual Washington University Spring Meeting and Eye Alumni Association Meeting — Location: Washington University, St. Louis, MO. Contact: Kathy Ryan, Washington University School of Medicine, 660 S. Euclid, St. Louis, MO 63110. 314/362-5722.

10 - 12 Allergy For the Clinician — Location: Ritz Carlton Hotel, St. Louis, MO. Contact: St. Louis School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-533-2712.

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17 - 18 Low Back & Sciatic Pain: Evaluation and Treatment — Location: Washington University Medical Center, St. Louis, MO. Contact: Cathy Caruso, Washington University School of Medicine, CME Office, 660 S. Euclid, Box 8063, St. Louis, MO 63110. 1-800-325-9862 or 314/362-6893.

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17 - 19 Internal Medicine Review —Location: University of Missouri, Columbia, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

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22 Cardiovascular Disease Update: Case Studies in Common Therapeutic Problems — Location: Hilton-St. Louis Airport, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712 or 314/577-8167.

31 The Second Annual Ultrasound Symposium — Location: von Gontard Conference Center, St. John's Mercy Medical Center, St. Louis, MO. Contact: Judith L. O'Guin, St. John's Mercy Medical Center, 615 S. New Ballas Road, St. Louis, MO 63141. 314/569-6826.

31 - June 2 A.K. Rice National Scientific Program — Location: Ritz-Carlton Hotel, St. Louis, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

June

3 - 5 Microsurgery of the Peripheral Nerve — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University School of Medicine, Continuing Medical Education, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

4 - 5 Transesophageal Echocardiography Course — Location: St. Louis University Medical Center, St. Louis, MO. Contact: CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

6 - 7 Patent Development — Location: Eldorado Hotel, Santa Fe, NM. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

6 - 8 Microsurgery of the Spine: Stabilization — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University School of Medicine, Continuing Medical Education, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

7 Perinatal Sonography: Clinical Applications — Location: Adam's Mark Hotel, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand, St. Louis, MO 63104. 1-800-533-2712.

7 - 8 Primary Pediatrics — Location: University of Missouri, Columbia, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

10 - 15 Microsurgery of the Brain — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University School of Medicine, Continuing Medical Education, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

15 - 20 Family Practice Medicine Review — Location: Ritz-Carlton, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

17 - 20 Combined Temporal Bone Surgical Dissection and Midas Rex Hands-On Workshop — Location: St. Louis University Medical Center, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

19 - 23 Southern Association for Geriatric Medicine 1st Annual Spring Meeting — Location: Hotel Vancouver, Vancouver, British Columbia. Contact: Robin Buchanan, Southern Association for Geriatric Medicine, 35 Lakeshore Drive, P.O. Box 190088, Birmingham, AL 35219. 205/945-8425.

20 - 23 Missouri Academy of Family Physicians 43rd Annual Scientific Assembly — Location: Marriott's Tan-Tar-A Resort, Osage Beach, MO. Contact: M.A.F.P., 222 W. Gregory Blvd., Suite G-1, Kansas City, MO 64114.

22 - 26 Back to the Basics in the Tetons — Location: Jackson Lake Lodge, Jackson, WY. Contact: Julie Potts/Anne Williamson, Missouri Postgraduate Course in Allergy, Inc., Suite A, 24-26 South Main Street, Liberty, MO 64068. 816/781-0902.

28 - 30 Annual Professional Meeting of the Missouri Chapter of American College of Surgeons — Location: Lodge of the Four Seasons, Lake Ozark, MO. Contact: Linda Wheelen, 1926 S. Broadway, Springfield, MO 65807. 417/869-5222.

28 - 30 Frontiers in Endosurgery (Urologists only) — Location: Washington University Medical Center, St. Louis, MO. Contact: Cathy Caruso, CME Office, Washington University School of Medicine, 660 S. Euclid, Box 8063, St. Louis, MO 63110. 1-800-325-9862 or 314/362-6893.

29 - 30 Advanced Cardiac Life Support Provider Course — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University Medical Center, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104-1083. 1-800-533-2712.

Coming in July —
The 133rd Annual Convention Issue

July

12 - 13 Advanced Trauma Life Support Provider Course — Location: St. Louis University, Margaret McCormick Doisy Learning Resources Center, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

20 - 27 9th Annual Medical Seminar, Topics in Contemporary Medicine — Location: Plummer's Great Slave Lake Lodge, Northwest Territories, Canada. Contact: Joseph F. Bocklage, M.D., 103 Oakdale Medical Center, 3366 Oakdale Avenue North, Minneapolis, MN 55422. 612/588-9478.

26 ACLS Recertification Course — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand, St. Louis, MO 63104. 1-800-533-2712.

31 - August 4 Southern Association for Oncology 4th Annual Meeting — Location: Crystal Palace, Nassau, Bahamas. Contact: Southern Association for Oncology, 205/942-0530.

August

6 - 8 Introduction to Doppler Echocardiography — Location: St. Louis University Medical Center, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

7 - 11

moor, Colorado Springs, CO. Contact: Southern Orthopaedic Association, 205/945-1848.

10 - 16 Tenth Annual Scientific Meeting and Exhibition of the Society of Magnetic Resonance in Medicine — Location: San Francisco, CA. Contact: SMRM, 1918 University Avenue, Suite 3C, Berkely, CA 94704. 415/841-1899. FAX: 415/841-2340.

September

10 - 11 Transesophageal Echocardiography Course — Location: St. Louis University Medical Center, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

18 - 20 Pediatric Advanced Cardiac & Trauma Support For Life and Pediatric Advanced Life Support Course (PALS/PACTS) — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University Medical Center, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104-1083. 1-800-533-2712.

23 - 25 Symposium on Aging, Musculoskeletal Disorders and Care of the Frail Elderly — Location: Clarion Hotel, St. Louis, MO. Contact: Conference Secretary, VA Medical Center, GRECC (111G-JB), St. Louis, MO 63125, FTS 280-6510 or 314/894-6510.

27 - 28 Advanced Trauma Life Support Provider Course — Location: St. Louis University, Margaret McCormick Doisy Learning Resources Center, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand, St. Louis, MO 63104. 1-800-533-2712.

October

6 - 7 Advanced Cardiac Life Support Provider Course — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University Medical Center, CME Office 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-533-2712.

8 - 10 Introduction to Doppler Echocardiography — Location: St. Louis University Medical Center, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

10 Pediatric Advanced Life Support Recertification Course (PALS) — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University Medical Center, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104-1083. 1-800-533-2712.

14 - 18 The Medicolegal Death Investigator Training Course — Location: St. Louis University, Margaret McCormick Doisy Learning Resources Center, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

November

16 - 19 Southern Medical Association 85th Annual Scientific Assembly — Location: Atlanta, GA. Contact: The Southern Medical Association, 1-800-423-4992.

Medical School News

University of Missouri-Columbia

■ **Robert G. Frank, Ph.D.,** associate professor of physical medicine and rehabilitation, has been named one of six Robert Wood Johnson Health Policy Fellows nationwide for 1991-92. Beginning September 5, he will spend one year in Washington, D.C., participating in the policy-making process while working for the federal government.

Robert G. Frank, Ph.D.

Upon his return he will have the capacity to advise on governmental relations, to assist in planning and to communicate in his teaching what he has learned, according to **Lester Bryant, M.D.,** dean of the School of Medicine.

The Robert Wood Johnson Foundation of Princeton, N.J., a large private organization that focuses on health care, funds Medicine in Washington, D.C. Since the fellowship program began in 1973, 84 mid-career faculty members from health-related professional schools have participated.

Frank is the first MU faculty member chosen for the honor. Each health professional school in the country may nominate only one candidate.

Frank will spend 11 weeks in orientation learning how health policy relates to other policy areas competing for funds. He will meet with top-level officials, health policy experts from think tanks and representatives of health-interest groups. For the subsequent eight months, Frank will work in a congressional or executive branch office assignment.

Frank, a clinical psychologist, has been on the MU faculty since 1979 and is director of the department of physical medicine and rehabilitation's division of psychology. He has served on the state's Head Injury Advisory Council since 1985.

■ **Coleen Kivlahan, M.D., M.P.H.,** clincal assistant professor of family and community medicine, has been appointed as the chief medical officer for the U.S. Health Resources and Services Administration.

HRSA, an agency of the Public Health Service, is the focal point for ensuring that primary health care is available to disadvantaged Americans made vulnerable by poverty, isolation, youth, old age or other conditions that restrict ready access to care.

Kivlahan formerly was medical director of the Missouri Department of Social Services-Medicaid Division and of the Division of Maternal, Child and Family Health of the Missouri Department of Health. While at HRSA, she will continue her epidemiological research on fatalities resulting from childhood injuries, especially deaths involving abuse or neglect.

■ Seven individuals were honored by the MU Medical Alumni Organization during an April 5 luncheon in Kansas City.

J. Neal Middelkamp, M.D., professor of pediatrics at Washington University and director of ambulatory pediatrics at St. Louis Children's Hospital, was awarded the Citation of Merit, the top honor given by the organization to an alumnus who has done outstanding work in his or her field. He received his medical degree from MU in 1946.

Two Outstanding Young Physician Awards were presented to alumni younger than 45 who have distinguished themselves in medicine. **Jean E. Holt, M.D.,** an ophthalmologist in private practice and a clinical associate professor at the University of Texas at San Antonio graduated from the school in 1972. **John A. Smith, M.D., Ph.D.,** who is on leave as associate professor of pathology at the Harvard Medical School, is serving as executive director of autoimmune diseases research and molecular immunology at Merck, Sharp & Dohme Research Laboratories.

State Representative Tommy Macdonnell, M.D., a private family practitioner from Marshfield, received the Community Service Award which honors alumni for significant community contributions. Macdonnell received his medical degree from MU in 1948.

Three faculty members who have demonstrated a special interest in the school were named honorary alumni. They are **Jack Colwill, M.D.,** professor and chairman of family and community medicine; **Gilbert Ross, Jr., M.D.,** professor and chief of urology in the department of surgery; and **James M.A. Weiss, M.D.,** professor and former chairman of psychiatry.

■ **Karl Weber, M.D.,** professor and director of Cardiology, presented "Myocardial Fibrosis and Hypertrophy: Role of Circulating Angiotensin II and Aldosterone" to the Second International Symposium on ACE Inhibation in London, England, April 17-21, 1991. While in London, he also presented "Cardioreparation with Lisinopril: A New Concept in the Treatment of Hypertension and Heart Failure" at a satellite meeting of the same convention.

In addition, Dr. Weber also presented "Reparative and Protective Effects of ACE Inhibitors in the Heart" at a conference on the clinical advances of tissue ACE inhibition in the treatment of cardiovascular disease, held in Atlanta, GA., March 2.

Washington University

■ **David J. Lipman, M.D.,** director of the National Center for Biotechnology information (NCBI) at the National Institutes of Health, delivered the *10th Annual Estelle Brodman Lecture* Thursday, April 18, at Washington University School of Medicine in St. Louis.

Lipman discussed the development of the national genome sequence database during the lecture, held in the Carl Moore Auditorium in St. Louis.

The Estelle Brodman Lecture is sponsored by the Washington University School of Medicine Library in honor of **Estelle Brodman**, who served as library director and professor of medical history at the School of Medicine from 1961-81. Brodman was considered an authority in the field of information technology, and the lectureship was established in recognition of her achievments at Washington University and her contributions to biomedical communication and medical history.

■ Researchers at Washington University School of Medicine in St. Louis need volunteers for a long-term study on the health benefits of exercise in older adults.

The study is funded by a five-year program project grant from the National Institute on Aging, part of the National Institutes of Health. The grant will provide approximately $500,000 in funding the first year. Led by **John O. Holloszy, M.D.,** professor of applied physiology in the Department of Internal Medicine, the study is the most comprehensive of its kind.

Volunteers must be between the ages of 62-75, non-smokers, healthy but sedentary, and free from medication for hypertension or heart problems. They must be willing to commit themselves to vigorous exercise one hour each day, five days a week, for periods ranging from six weeks to one year.

Volunteers will undergo a screening exam and tests to determine current fitness levels, glucose tolerance, cholesterol levels and body composition. In addition, all women will have their bone density measured. All participants will receive copies of the results of these measurements. Some participants will exercise in medical center facilities Monday-Friday at any time between 2:30-5:30 p.m. while others will serve as a non-exercising control group.

Volunteers will be assigned to one of four studies in which researchers will monitor the effects of exercise on either cholesterol metabolism, heart function, bone mass or muscle strength. Each participant will receive an individually prescribed, supervised exercise program, which may include walking, biking, rowing, jogging, and weight lifting. Upon completion of training, each volunteer will be prescribed a home maintenance program.

For more information, call 314/362-2397.

St. Louis University

■ St. Louis University School of Medicine, Washington University School of Medicine and seven other institutions across the country met in Washington, D.C., in April to collaborate on a five-year, nationwide study to combat the growing numbers of Black and Hispanic children who are stricken or killed by asthma each year. The St. Louis portion of the study will be jointly conducted by St. Louis and Washington universities.

The study, called the National Cooperative Inner-City Asthma Study, is funded by the National Institute of Allergy and Infectious Diseases (NIAID). The Institute will provide $2.5 million for the initial year of the five-year study, with $260,000 of that going to the two St. Louis schools.

Co-principal investigators for the study from St. Louis University are **Raymond G. Slavin, M.D.,** professor of internal medicine and director of the division of allergy and immunology and **Gregory Evans, Ph.D.,** associate professor of public health in the Center for Health Services Education and Research (CHSER). Other researchers include: **Al P. Knutsen, M.D.,** associate professor of pediatrics and director of the division of pediatric allergy and immunology, and **Ana-Maria Murgueytio, M.D.,** research associate in CHSER. The other institutions participating in the NIAID study include: Albert Einstein College of Medicine, Johns Hopkins University School of Medicine, Children's Memorial Hospital, Case Western Reserve University, Henry Ford Hospital, Howard University College of Medicine, and Mount Sinai School of Medicine.

■ **Govindaswamy Chinnadurai, Ph.D.,** professor of molecular virology at the Institute for Molecular Virology, St. Louis University School of Medicine, has been awarded more than $2.2 million in grants over the next five years ($407,881 during 1991) for research on the human immunodeficiency virus (HIV) and on cancer cells.

Govindaswamy Chinnadurai, Ph.D.

Two grants totalling more than $1.5 million from the National Institute of Allergy and Infectious Diseases will fund research projects specifically examining novel approaches to inhibit HIV replication and its spread throughout the body. **Max Q. Arens, Ph.D.,** from Washington University School of Medicine, is collaborating on these research projects.

Chinnadurai was also awarded a $713,670 renewal grant by the National Cancer Institute to continue his research into the process by which human adenoviruses transform normal cells into cancerous ones. By examining how the adenovirus oncogenes, or cancer genes, function, researchers could gain a better understanding of abnormal growth and, subsequently, what triggers cancerous growth in the human body.

■ **John D. Bouhasin, M.D.,** clinical professor of pediatrics and director of the division of hemostasis in the department of pediatrics, and **J. Heinrich Joist, M.D., Ph.D.,** professor of internal medicine and director of the division of hematology at St. Louis University School of Medicine, have been awarded a three-year, $533,889 renewal grant from the U.S. Public Health Service. Joist and Bouhasin will use the award for continued comprehensive hemophilia care.

Bouhasin and Joist are co-directors of the Missouri/Illinois Regional Comprehensive Hemophilia Diagnostic and Care Center based at Cardinal Glennon Children's Hospital and St. Louis University Medical Center. The hemophilia center has been profiding specialized care for patients with hemophilia and other inherited bleeding disorders since 1962. It is one of the largest centers of its kind in the United States, providing primary care and consultations for more than 450 pediatic and adult patients. The center's staff teaches patients how to manage their disease independently by using blood clotting concentrates that can be administered at home. The care provided by Joist and Bouhasin and the center's multidisciplinary staff has become an increasingly complex and challenging activity because most of the patients who received concentrates between 1978 and 1985 became infected with the human immunodeficiency virus.

John E. Morley, M.D., *Dammert Professor of Gerontology* and director of the division of geriatric medicine, St. Louis University School of Medicine, has been awarded a three-year $531,177 grant titled, "Faculty Training Projects in Geriatric Medicine and Dentistry."

Morley will use the funding to support a program designed to prepare internists, family practitioners, and dentists to assume roles as academic geriatricians in leading an effort to improve health care in the United States delivered to senior citizens.

Margaret J. Weidman, Ph.D., assistant professor of biochemistry and molecular biology, St. Louis University School of Medicine, has been awarded two grants totalling $180,000 for her research on the secretion processes of cells.

A two-year grant from the American Cancer Society for $160,000 will be used to fund Weidman's pilot project titled, "Mechanism of Action and Regulation of the Non-Sensitive Fusion Protein." Weidman is studying how proteins are secreted from cells. She is concentrating her study on a specific regulatory protein that is similar to regulatory proteins involved in other cell growth processes. By studying normal cell properties, she hopes to learn why cellular protein secretions change so drastically when cells become malignant. In the future, this data could lead to earlier detection of cancer.

A one-year grant from the University of Missouri for $20,000 will go toward Weidman's study titled, "Analysis of an Integral Membrane Receptor Involved in Intracellular Vesicular Transport." With the support of the Advisory Board of Alzheimer's Disease and Related Disorders Program, Weidman is trying to identify the components involved in cell secretion and their relationship to Alzheimer's.

St. Louis University School of Medicine has received a $158,000 grant from the National Center for Research Resources to fund the acquisition of scientific equipment. The money is being used to purchase a confocal fluorescence imaging system.

The imaging system is a significant scientific tool because it allows researchers to study the structure and make-up of cells three-dimensional with the help of a laser and computer. By identifying the fluorescent light that molecules emit during activity, scientists can trace molecules within cells and map their distribution.

According to **David Lagunoff, M.D.,** associate dean for research and assistant vice president for research and development at St. Louis University Medical Center, the confocal imaging system is the third major scientific instrument purchased with instrumentation grant funds. Grants are awarded to institutions that demonstrate a significant number of research activities.

Kenneth Solomon, M.D., associate professor of psychiatry and human behavior in the division of geriatric psychiatry has been awarded a one-year, $20,000 grant titled, "Use of the SPECT Imaging as a Biologic Marker for the Diagnosis of Alzheimer's Disease with and without Psychotic Symptoms."

The funding will support the use of single photon emission computed tomography (SPECT). SPECT is a computerized camera that rotates around the patient in a 360 degree arc, taking pictures that are reconstructed into a 3-D image.

Solomon and his colleagues will analyze the 3-D images of the brain to help assess regional blood flow to the brain. He will use the scan to see if there is a correlation of an increase or a decrease of blood flow of those people with and without Alzheimer's disease.

Robert B. Belshe, M.D., professor of internal medicine and director of infectious diseases, published the second edition of his book titled, *Textbook of Human Virology*. The book was released in January. The 45-chapter text includes national and international authors in the field of virology. Belshe said all the chapters have been updated to include contemporary information on the molecular biology of the viruses as well as the revised clinical descriptions of the diseases associated with various infections.

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Hospital Medical Staff Section Addresses Health Care Economics

Richardson K. Noback, M.D.
Kansas City, Missouri

After the February 10 session of the Missouri Hospital Medical Staff Section meeting, several of those in attendance asked for a summary of the central points in my discussion. The following material provides those points for you.

I used our discussions of health care economics at last year's meetings of the HMSS and of MSMA to establish the context for the February 10 session. I also reviewed the AMA House of Delegates' acceptance at Annual 1990 of our resolution to combat economic misinformation followed by the joint request at Interim 1990 of the Missouri Caucus and the full national HMSS that the AMA vigorously implement the policy established earlier in 1989.

Myths

There are seven prevalent and important myths we need to explode whenever possible.

Myth #1: The assertion that run-away inflation in health care prices exists in the United States.

Myth #2: The idea that health care professionals and agencies act independently of the general society to determine the volumes, types, and costs of health services used by the public.

Myth #3: The claim that present expenditures for the Medicare Program are excessive and threaten the solvency of that program and the Federal budget.

Myth #4: The view that too often health service professionals and health service organizations present charges that are too high.

Myth #5: The proposition that there is a forced choice between expenditures for health services for the elderly, who require many such services as they approach their deaths, and care for children and young, poor mothers.

Myth #6: A new threat faces the nation – rationing of health services since the country cannot afford the health care that people use.

Myth #7: The idea that current health services arrangements should be replaced by governmentally directed or operated programs.

Canadian Health Care Programs

Many people discuss Canadian health care programs, yet usually forget important facts:

1. Canada and the United States need to be compared accurately; this is seldom done when people talk about national expenditures for health services.
2. In Canada, capital expenditures are not included in health services costs.
3. Research and development uses 0.9% of the Canadian Gross National Product but 3.3% of American GNP.
4. In Canada, administrative costs of its health care system are not counted as part of health service costs; in America such activities are reported to consume about 20% of health service expenditures.
5. Canadians spend a larger percent of their GNP on health services than we spend when the same things are compared.
6. Canadians have less access to high technology than do Americans.
7. In Canada there are significant limitations on the amount of routine care available. The average waiting time for a cholecystectomy is between seven and eight months.

The West German Experience

Many people discuss the West German experience as a potential model for the United States.

As with Canada, they often forget important facts:

1. There is a floor of services available for all through health care associations that draw on a mix of governmental and payroll derived funds.
2. There are several levels of care available; the more desirable levels require additional payments by those with necessary economic means.
3. There are limits to the services available. For a hip replacement, for example, the patient may wait for an opening at the nearby hospital, or travel to a more distant hospital if one has a shorter waiting list.
4. The operations and efficiency of the health care associations appear to be good. There are 2000 of them. The United States has 1200 insurance companies and various governmental payors with the levels of inefficiency about which many comment.
5. There is a message for the United States in the German ability to decentralize with efficiency through 2000 organizations; decentralization is a reasonable option rather than placing more and more in the hands of the Federal Government.

New Zealand

New Zealand had the western world's first system of universal access to health care through a central and governmental program financed by taxes. This antedated the National Health Service in Britain. New Zealand had much for other countries to study until economic downturns, a growing welfare state, and growing federal deficits became large problems. The country is now dismantling its health care system. We should pay attention to the New Zealand experiences.

Incentive-Disincentive Equations

Estimates place the proportion of American health care expenditures that come from the citizens' choice of unhealthy lifestyles at between 50% and 70%. Yet Americans are consistently unwilling to be open and realistic about these estimates, the central roles of incentives as well as disincentives in human choices, the incentives and disincentives that influence health care choices, and possible prudent changes in the incentive-disincentive equations in our country.

Nationalizing Funding

While many advocate various ideas about nationalizing funding and/or the provisions of health services, they frequently overlook major facts.

1. The world is now experiencing, and Americans are seeing the massive rejection of centralized planning and control. It is no longer acceptable in Eastern Europe or the Soviet Union. It is less and less acceptable in South America, Africa, and Asia.
2. Wherever centralized control or financing of health services has been put in place, there are two consistent developments. First, the public seeks more care than can be financed. Second, waiting lists and various forms of rationing appear. It is only a matter of time until these twin troubles appear. A country does not avoid service and costs decisions by nationalizing health services or payment methods.
3. Those who fail to flag these problems when they presume to speak as informed commentators fail the test of preparation, fairness and responsibility.

Economists

Economists are quoted often. Physicians tend to believe that economists draw upon quantification, theories tested by observation, and an ability to establish correctness in ways like those of the hard sciences. These conditions do not apply. Rather, economists tend to use charts and graphs to illustrate mental constructs, not evidence or data.

Further, contemporary economists disagree about major issues. Empirically, they have great difficulty in predicting future events. Since there are so many variables in the operation of an economy, the permutations make it impossible for any precise predictions. At best, economists can provide estimates of the direction and magnitude of vectors in the economy.

Advisements

I suggest that we all avoid attributing too much capacity to many apparent experts. Instead, I advise that we examine their arguments and assumptions for evidence, logic, adequacy of definitions, reasonable measurements, and absence of tricks with data or statistical analyses.

■

Resident Section News

Gifts to Residents from Industry

Robert J. McQuillan, M.D.
Kansas City

As young physicians, residents have a vested interest in the integrity of the medical profession. It is important, then, to be cautious in promotion activities.

Recently, the AMA adopted guidelines for its members on receiving gifts from industry.[1] While the report and its guidelines are directed at physicians, the medical products industry is taking note.

Business ethics require corporations to maximize profits in an effort to provide dividends to investors.[2] However, corporations cannot ignore what would otherwise be moral responsibilities and obligations in an attempt to maximize profits. Industrial promoters could possibly take advantage of consumers' (physicians and patients) imperfect knowledge of product features, defects, prices, and alternative products. This, along with other factors, makes the relationship between physicians and industry increasingly complex and the potential for abuse is of concern.[3,4]

Residents are often targets of industry promotion. And they may be more vulnerable to this activity than practicing physicians because: 1) promotions are often biased in favor of the company product and since residents are less experienced, they may not have the background to view the data with adequate knowledge and skepticism; 2) residents are often more accessible to industry representatives and have more contact with them at hospitals, journal clubs, etc . . . ; and 3) residents are often on a tight budget and may be more inclined to accept dinner at a nice restaurant where a $100 honorarium is given for "marketing consultation" (a relatively common activity engaged in by pharmaceutical companies).

The AMA Council on Ethical and Judicial Affairs has stated that:

"Scholarship or other special funds to permit medical students, residents, and fellows to attend carefully selected educational conferences may be permissible as long as the selection of students, residents, or fellows who will receive the funds is made by the academic or training institution."[5] The other guidelines apply to all physicians, including residents.

As young physicians, residents must have a vested interest in the integrity of the profession. If residents are in fact more vulnerable to influence from industry, then they must be more careful about their exposure to promotional activities.

References

1. AMA Interim 1990, Report F, Council on Ethical and Judicial Affairs, "Gifts to Physicians from Industry."
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3. Graves J: Frequent-flyer programs for drug prescribing (letter to the editor) *NEJM* 1987;317:252.
4. Chren MM, Landefeld CS, Murray TH: Doctors, drug companies and gifts. *JAMA* 1989;262:3448-3451.
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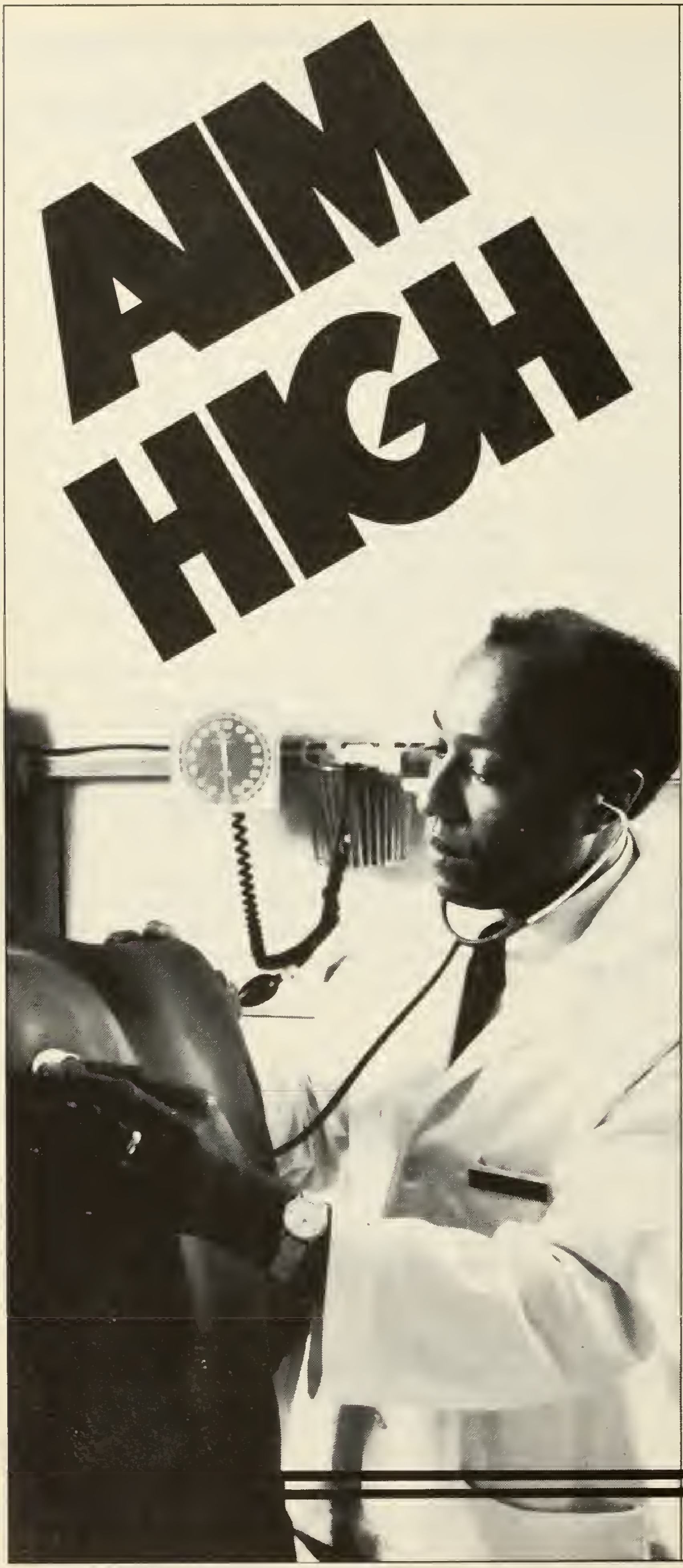
Editor's Note: *Dr. McQuillan is a resident in anesthesiology at St. Luke's Hospital/University of Missouri-Kansas City. He is resident member of the American Medical Association's Council on Ethical and Judicial Affairs.*



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AIR FORCE

New Members

■ **Christopher L. Ahlering, M.D.,** 621 S. New Ballas Road, Suite 695, St. Louis 63141, has become a member of the St. Louis Metropolitan Medical Society. Dr. Ahlering received his preliminary education and obtained his medical degree at the University of Missouri-Kansas City School of Medicine in 1984. He completed his residency at St. John's Mercy Medical Center, St. Louis, MO. Dr. Ahlering specializes in obstetrics/gynecology.

■ **Donald E. Arnold, M.D.,** 621 S. New Ballas Road, St. Louis 63141, has become a member of the St. Louis Metropolitan Medical Society. Dr. Arnold received his preliminary education at the University of Wisconsin and obtained his medical degree at the University of Wisconsin School of Medicine in 1984. He completed his residency at Dartmouth-Hitchcock Medical Center, Hanover, NH. Dr. Arnold specializes in anesthesiology.

■ **Rene P. Bollier, M.D.,** 1010 Carondelet Drive, Suite 301, Kansas City 64114, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. Bollier received his preliminary education at Kansas State University and obtained his medical degree at the University of Kansas School of Medicine in 1984. He completed his residency at Baylor College of Medicine, Houston, TX. Dr. Bollier specializes in family practice.

■ **Ernest E. Davis, M.D.,** 13045 Tesson Ferry Road, St. Louis 63128, has become a member of the Missouri State Medical Association. Dr. Davis received his preliminary education at the University of Illinois and obtained his medical degree at the University of Illinois Medical School in 1974. He completed his residency at Deaconess Hospital, Milwaukee, WI. Dr. Davis specializes in family practice.

■ **Cherie S. Dunphy, M.D.,** St. Louis University Medical Center, Dept. of Pathology, 1402 S. Grand Blvd., St. Louis 63104, has become a member of the Missouri State Medical Association. Dr. Dunphy received her preliminary education at Centenary College of Louisiana and obtained her medical degree at the Louisiana State University School of Medicine in 1982. She completed her residency at the Louisiana State University School of Medicine, Shreveport, LA. Dr. Dunphy specializes in anatomic and clinical pathology.

■ **James J. Gibbons, M.D.,** 3635 Vista Ave., St. Louis 63110, has become a member of the St. Louis Metropolitan Medical Society. Dr. Gibbons obtained his medical degree at the St. Louis University School of Medicine in 1983. He completed his residency at the Mayo Clinic, Rochester, MN. Dr. Gibbons specializes in anesthesiology.

■ **James M. Goldring, M.D.,** Neurology, Inc., 500 Keene Street, Suite 406, Columbia 65201, has become a member of the Boone County Medical Society. Dr. Goldring received his preliminary education at Washington University and obtained his medical degree at the Washington University School of Medicine in 1986. He completed his residency at Barnes Hospital, St. Louis, MO. Dr. Goldring specializes in neurology.

■ **Daniel B. Gould, M.D.,** 5535 Delmar, St. Louis 63112, has become a member of the St. Louis Metropolitan Medical Society. Dr. Gould received his preliminary education at Dartmouth College and obtained his medical degree at Jefferson Medical College in 1971. He completed his residency at the University of Alabama, Birmingham, AL. Dr. Gould specializes in anesthesiology.

■ **Harry G. Greditzer, III, M.D.,** Ph.D., 11133 Dunn Road, St. Louis 63136, has become a member of the St. Louis Metropolitan Medical Society. Dr. Greditzer obtained his medical degree at the St. Louis University School of Medicine in 1975. He completed his residency at the Mayo Clinic, Rochester, MN. Dr. Greditzer specializes in diagnostic radiology.

■ **Kurt R. Guindon, M.D.,** 1101 B Southwest Blvd., Jefferson City 65102, has become a member of the Cole County Medical Society. Dr. Guindon received his preliminary education at South Dakota State University and obtained his medical degree at the University of South Dakota School of Medicine in 1985. He completed his residency at Karl Menninger School of Psychiatry, Topeka, KS. Dr. Guindon specializes in psychiatry.

■ **Edward W. Heidbrier, M.D.,** 7345 Watson Road, St. Louis 63119, has become a member of the St. Louis Metropolitan Medical Society. Dr. Heidbrier obtained his medical degree at the Universidad Tecnologica de Santiago (Litesa) in 1984. He completed his residency at Deaconess Hospital, St. Louis, MO. Dr. Heidbrier specializes in internal medicine.

■ **John J. Iacobucci, M.D.,** 400 S. Kingshighway, St. Louis 63110, has become a member of the Missouri State Medical Association. Dr. Iacobucci received his preliminary education at Michigan State University and obtained his medical degree at the University of Michigan School of Medicine in 1982. He completed his residency at the University of Michigan School of Medicine, Ann Arbor, MI. Dr. Iacobucci specializes in plastic surgery.

■ **Damasus S. Jayamanne, M.D.,** 200 St. Mary's Medical Plaza, Jefferson City 65101, has become a member of the Cole County Medical Society. Dr. Jayamanne received his preliminary education at St. Benedicts

College and obtained his medical degree at the Medical School of Peradeniya, Sri Lanka in 1967. Dr. Jayamanne specializes in internal medicine.

■ **John M. Lorei, M.D.**, 4401 Wornell Road, St. Luke's Hospital, Kansas City 64111, has become a member of the Missouri State Medical Association. Dr. Lorei received his preliminary education at the University of Iowa and obtained his medical degree at the University of Iowa Medical School in 1987. He completed his residency at the University of Pittsburgh, Pittsburg, PA. Dr. Lorei specializes in emergency medicine.

■ **Anthony J. Lubniewski, M.D.**, 660 S. Euclid, Box 8096, St. Louis 63110, has become a member of the Missouri State Medical Association. Dr. Lubniewski received his preliminary education at the University of Florida and obtained his medical degree at the University of Florida School of Medicine in 1985. He completed his residency at Washington University, St. Louis, MO. Dr. Lubniewski specializes in ophthalmology.

■ **Maria G. Maminta-Streiff, M.D.**, 1035 Bellevue, Suite 208, St. Louis 63117, has become a member of the St. Louis Metropolitan Medical Society. Dr. Maminta-Streiff obtained her medical degree at the Cebu Doctors College of Medicine, Cebu City, Philippines in 1983. She completed her residency at St. Louis University Hospitals, St. Louis, MO. Dr. Maminta-Streiff specializes in obstetrics/gynecology.

■ **Eugene W.J. Pearce, M.D.**, Truman Medical Center, Dept. of OB/GYN, 2301 Holmes, Kansas City 64108, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. Pearce obtained his medical degree at Washington University School of Medicine in 1949. He completed his residency at the University of Kansas Medical Center, Kansas City, KS. Dr. Pearce specializes in obstetrics/gynecology.

■ **Kathy M. Perryman, M.D.**, Anesthesia Associates, Inc., Suite 138, 6400 Prospect, Kansas City, 64132, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. Perryman received her preliminary education at Kansas University and obtained her medical degree at the University of Missouri-Kansas City School of Medicine in 1986. She completed her residency at St. Luke's Hospital, Kansas City, MO. Dr. Perryman specializes in anesthesiology.

■ **Thomas E. Scott, M.D.**, 6420 Prospect, Suite T-101, Kansas City 64132, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. Scott received his preliminary education at the University of Kansas and obtained his medical degree at the Kansas University School of Medicine in 1981. He completed his residency at Yale-New Haven Hospital, New Haven, CT.

■ **Brenda S. Smith, M.D.**, 4143 Cambridge, Kansas City, KS 66103, has become a member of the Missouri State Medical Association. Dr. Smith obtained her medical degree at the University of Kansas School of Medicine in 1986. She completed her residency at St. Luke's Hospital, Kansas City, MO. Dr. Smith specializes in obstetrics/gynecology.

■ **Michael G. Steenbergen, M.D.**, Jefferson City Family Practice, Inc., 1505 Southwest Blvd., Jefferson City 65109, has become a member of the Cole County Medical Society. Dr. Steenbergen received his preliminary education and obtained his medical degree at the University of Missouri-Kansas City School of Medicine in 1987. He completed his residency at Trinity Lutheran Family Practice, Kansas City, MO. Dr. Steenbergen specializes in family practice.

■ **Phillip C. Weinberger, M.D.**, P.O. Box 88, Lexington 64067, has become a member of the Lafayette-Ray County Medical Society. Dr. Weinberger received his preliminary education at the University of Alabama and obtained his medical degree at the University of Alabama School of Medicine in 1974. He completed his residency at Urology Carraway Methodist Center. Dr. Weinberger specializes in urology.

■ **Mark R. Wick, M.D.**, One Barnes Hospital Plaza, St. Louis 63110, has become a member of the Missouri State Medical Association. Dr. Wick received his preliminary education at Carroll College and obtained his medical degree at the University of Wisconsin School of Medicine in 1978. He completed his residency at the Mayo Clinic, Rochester, MN. Dr. Wick specializes in pathology.

■ **Thomas K. Zink, M.D.**, P.O. Box 27379, St. Louis 63141-1779, has become a member of the St. Louis Metropolitan Medical Society. Dr. Zink received his preliminary education and obtained his medical degree at the University of Missouri-Kansas City School of Medicine in 1980. He completed his residency at St. John's Mercy Medical Center, St. Louis, MO. Dr. Zink specializes in emergency medicine.

■ Student Members

St. Louis University

Michael W. Romeo

Washington University

John C. Sun

University of Missouri-Kansas City

Anthony A. Bennett
Rajiv S. Dahiya
Carolyn M. Haibach
Michael J. Manalo
Lisa J. McClellan
Jeffrey S. Shilt
Ronald E. Thomas

Physician's Recognition Awards

Sixty-one MSMA members qualified for the MSMA-AMA Physician's Recognition Award during February 1991. The award, presented by the Missouri State Medical Association and the American Medical Association, is given to those physicians who voluntarily complete 150 credit hours of continuing medical education within a three-year period. Sixty of the credit hours must be earned in Category 1 programs.

Audrain

H. Peter Ekern, *Mexico*
David L. Gifford, *Mexico*

Boone

Luke W. Lucas, *Columbia*

Buchanan

Thomas W. Alderson, *St. Joseph*
Michael D. DePriest, *St. Joseph*
Jon W. Gaffney, *St. Joseph*

Butler-Wayne-Ripley-Carter

Ricardo M. Ramirez, *Poplar Bluff*

Chariton-Macon-Monroe-Randolph

James E. Campbell, *Macon*

Clay Platte

Don G. Fortin, *Kansas City*

Cole

Charlotte M. Balcer, *Jefferson City*

Franklin-Gasconade-Warren

Charles H. Sincox, *Washington*

Grand River

Hansa N. Patel, *Bethany*

Greene

Rodney K. Geter, *Springfield*
Larry W. Halverson, *Springfield*
Robert D. Johnson, *Springfield*
William J. Otto, *Springfield*
Lisa G. Powell, *Springfield*

Jasper

Robert B. Brigden, *Neosho*

Metro Med of Greater Kansas City

Mary C. Colglazier, *Kansas City*
Theodore C. DeFeo, *Kansas City*
Raymond W. Hartwig, *Kansas City*
James P. Hopkins, *Kansas City*
Ted E. Lockwood, *Kansas City*
Robert E. McCormack, *Kansas City*
Bernard J. Melia, *Kansas City*
Hugh E. Mosbacher, *Independence*
Margaret B. Nickell, *Kansas City*
Ernest D. Szabados, *Independence*
Harry E. Webb, *Kansas City*

Mid-Missouri

William M. Duff, *Rolla*

Mineral Area

Kevin D. Boatright, *Farmington*

Ozarks

Theodore W. Garrison, *Camdenton*
Ruth Kauffman, *Versailles*

Northeast

Robert W. Buben, *Hannibal*
Lent C. Johnson, *Hannibal*

SEMO

Robert L. Frazier, *Sikeston*

St. Charles-Lincoln

William F. Sill, D.O., *St. Peters*

St. Louis Metro

Leonard Berg, *St. Louis*
Benje Boonshaft, *St. Louis*
Edmond B. Cabbabe, *St. Louis*
Marvin A. Cook, *St. Louis*
Kenneth D. Corwin, *St. Louis*
Joseph W. Eades, *St. Louis*
Josiah O. Ekunno, *St. Louis*
Charles D. Ettelson, *Chesterfield*
George A. Gates, *St. Louis*
Richard M. Halford, *Festus*
Donald L. Kaminski, *St. Louis*
Felix F. Larocca, *St. Louis*
Jay L. Meyer, *St. Louis*
Julio Montes De Oca, *Clayton*
Carl H. Nielsen, *Webster Groves*
Christian E. Paletta, *Webster Groves*
Carlos Pappalardo, *St. Louis*
Meredith C. Payne, *Chesterfield*
Joseph M. Ribaudo, *St. Louis*
Edward W. Szoko, *St. Charles*
Manfred Thurmann, *St. Louis*

West Central

Robert L. Magee, *El Dorado Spring*
Jerome H. Thies, *Osceola*
Robert L. Wheeler, *Harrisonville*

Final Disciplinary Actions

The following is a listing of final disciplinary actions taken by the State Board of Registration for the Healing Arts. The listing includes actions finalized through November 1990. This information is made available to the public under the provisions of Section 334.101 RSMo.

■ **HOWARD L. AUBREY, D.O.,** *Wellston, OH*
Order dated 9/17/90 — Revocation of Missouri license
Violation: Section 334.103 RSMo.

■ **ARTHUR L. CASEY, M.D.,** *St. Louis, MO*
Order dated 10/5/90 — Ninety (90) day suspension
Order dated 1/2/91 — Five (5) year probation
Violation: Section 334.100.2(5)(6)(13) RSMo 1986.

■ **THOMAS B. CHODOSH, D.O.,** *Corpus Christi, TX*
Order dated 9/7/90 — Agreement (Must appear before Board before returning to practice in Missouri)
Violation: Section 334.100.2(8), RSMo Supp. 1989.

■ **ALFRED S. DAZO, M.D.,** *Carmichael, CA*
Order dated 11/15/90 — Two (2) year probation
Violation: Section 334.100.2(8)RSMo Supp. 1987.

■ **ROBERT V. DELL, M.D.,** *Poplar Bluff, MO*
Order dated 11/6/90 — Two (2) year suspension retroactive to 9/15/88, Five (5) year probation
Violation: Section 334.100.2(8), RSMo Supp. 1989.

■ **KEVIN W. EGGERMAN, M.D.,** *St. Louis, MO*
Order dated 8/27/90 — One (1) year probation
Violation: Section 334.100.2(1)(22)(24), RSMo Supp. 1989.

■ **MORRIS C. EPLEY, D.O.,** *Huntsville, MO*
Order dated 7/27/90 — Five (5) year probation
Violation: Section 334.100.2(24), RSMo Supp. 1988.

■ **JAMES M. ESPER, D.O.,** *Erie, PA*
Order dated 9/17/90 — Revocation of Missouri license
Violation: Section 334.103, RSMo.

■ **SAID A. ETTEHADIEH, M.D.,** *St. Louis, MO*
Order dated 8/17/90 — Reprimand
Violation: Section 334.100.2(8) RSMo Supp. 1989.

■ **ARCHIBALD F. FORSTER, M.D.,** *Long Beach, CA*
Order dated 9/17/90 — Revocation of Missouri license
Violation: Section 334.103 RSMo.

■ **ROBERT L. FREDERICKSON, M.D.,** *Sedalia, MO*
Order dated 9/7/90 — Reprimand
Violation: Section 334.100.2(4h) RSMo Supp. 1989.

■ **ARTURO GONZALEZ, D.O.,** *Cole Camp, MO*
Order dated 8/2/90 — Reprimand
Violation: Section 334.100.2(4d)(13) RSMo Supp. 1988.

■ **JAMES E. GOTHAM, M.D.,** *Detroit, MI*
Order dated 9/17/90 — Revocation of Missouri license
Violation: Section 334.100.2(2)(4a)(4g)(4o)(8)(13)(17) RSMo.

■ **NEVILLE GRANT, M.D.,** *St. Louis, MO*
Order dated 11/20/90 — Two (2) year probation
Violation: 4 CSR 150-5.010.

■ **ALEX E. HARVEY, M.D.,** *Murfreesboro, TN*
Order dated 9/4/90 — Agreement (Must appear before Board before returning to practice in Missouri)
Violation: Section 334.100.2(8) RSMo 1986.

■ **PAUL H. HILBERT, M.D.,** *St. Louis, MO*
Order dated 9/30/90 — Retirement agreement

■ **J. MICHAEL HOJA, M.D.,** *Poplar Bluff, MO*
Order dated 11/5/90 — Seven (7) year probation
Violation: Section 334.100.2(1)(4g)(5)(13)(22) RSMo Supp. 1989.

■ **ROBERT P. JONES, M.D.,** *Blue Springs, MO*
Order dated 11/1/90 — Five (5) year probation
Violation: Section 334.100.2(1)(4h)(6)(13)(22) RSMo.

■ **ALYWIN E. KLUTTZ, M.D.,** *St. Louis, MO*
Order dated 11/21/90 — Reinstatement denied

■ **ALOYSIUS W. KUCH, D.O.,** *Phoenix, AZ*
Order dated 10/18/90 — Three (3) year probation retroactive to 6/1/89
Violation: Section 334.100.2(4) RSMo Supp. 1987.

■ **IAN MACGILLIVRAY, D.O.,** *Phoenix, AZ*
Order dated 9/17/90 — Revocation of Missouri license
Violation: Section 334.103 RSMo.

■ **OTIS MOSELEY, M.D.,** *Osage Beach, MO*
Order dated 8/17/90 — Three (3) year probation
Violation: Section 334.100.2(4h)(13) RSMo Supp. 1989.

■ **HAROLD J. PEDERSEN, M.D.,** *Ballwin, MO*
Order dated 9/25/90 — Reinstatement denied
Order dated 10/30/90 — Agreement (Restricted license will be granted if specific examination is passed)

■ **ARTHUR G. PETERSEN, M.D.,** *Leawood, KS*
Order dated 9/24/90 — Reinstatement denied

■ **JOHN RANELLE, D.O.,** *Wolfe City, TX*
Order dated 8/22/90 — Agreement (Must appear before Board before returning to practice in Missouri)
Violation: Section 334.100.2(8) RSMo Supp. 1989.

■ **PHILIP D. REISTER, M.D.,** *Overland Park, KS*
Order dated 8/29/90 — Three (3) year probation
Violation: Section 334.100.2(6) RSMo 1989.

■ **EARL H. SALHANY, D.O.,** *Lobelville, TN*
Order dated 11/6/90 — Agreement (No controlled substance authority in Missouri)
Violation: Section 334.100.2(8) RSMo Supp. 1989.

■ **LARRY A. SCHAFER, M.D.,** *Wheat Ridge, CO*
Order dated 9/4/90 — Seven (7) year probation retroactive to 11/3/89
Violation: Section 334.100.2(8) RSMo Supp. 1989.

■ **JULIANN MARY SMITH, M.D.,** *St. Louis, MO*
Order dated 5/18/90 — Probation terminated

■ **PHILIP R. SOSNOFF, D.O.,** *Florissant, MO*
Order dated 11/1/90 — Reprimand
Violation: Section 334.100.2(13) RSMo Supp. 1989.

■ **JAMES W. SPINDLER, M.D.,** *Branson, MO*
Order dated 8/10/90 — Probation terminated

■ **FRED SREBNICK, M.D.,** *Miami, FL*
Order dated 10/9/90 — Three (3) year probation
Violation: Section 334.100.1(8) RSMo Supp. 1989.

■ **JOHN B. STOLIAR, M.D.,** *St. Louis, MO*
Order dated 10/31/90 — Agreement (No practice in urology) in lieu of finding probable cause to convene a competency panel)

■ **JUDITH THARP, M.D.,** *Leavenworth, KS*
Order dated 8/17/90 — Vountary surrender
Violation: Section 334.100.2(4h)(4o)(13)(22) RSMo Supp. 1989.

■ **STANLEY J.WILSON, M.D.,** *Sedalia, MO*
Order dated 9/7/90 — Reprimand
Violation: Section 334.100.2(4h) RSMo Supp. 1989.

■ **TYRUS D. WINTER, M.D.,** *St. Louis, MO*
Order dated 11/6/90 — Five (5) year probation
Violation: Section 334.100.2(4c)(4f)(5)(6) RSMo Supp. 1987.

Attention Physicians:

The 1991-92 MSMA Annual Directory Issue will be published in August. If your address has changed or will change and you want your new address to be included in the directory, send that information to the Managing Editor by June 1, 1991.

Attention Missouri Medical Specialty Organizations, Metropolitan Specialty Organizations, and Volunteer Health Agencies:

Please send the name of your president and your meeting dates to be included in the 1991-92 Directory to the Managing Editor by June 1, 1991.

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Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalmic centers and release of posterior pituitary hormone.

Reportedly, Yohimbine exerts no significant influence on cardiac stimulation and other effects mediated by B-adrenergic receptors, its effect on blood pressure, if any, would be to lower it; however no adequate studies are at hand to quantitate this effect in terms of Yohimbine dosage.

Indications: Yocon® is indicated as a sympathicolytic and mydriatric. It may have activity as an aphrodisiac.

Contraindications: Renal diseases, and patient's sensitive to the drug. In view of the limited and inadequate information at hand, no precise tabulation can be offered of additional contraindications.

Warning: Generally, this drug is not proposed for use in females and certainly must not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer history. Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general.

Adverse Reactions: Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug.[1,2] Also dizziness, headache, skin flushing reported when used orally.[1,3]

Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.[1,3,4] 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to ½ tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.[3]

How Supplied: Oral tablets of Yocon® 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

References:
1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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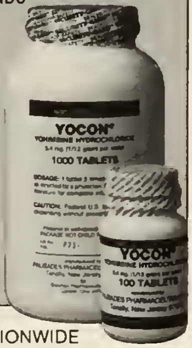

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References

References should be cited in numerical order in the text and arranged at the end of the article in the same order in which they are cited. The reference should give name of author, title of article, name of periodical, volume number, initial page number and year. Authors are responsible for reference accuracy.

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Editorials should be written in clear, concise language. Length should be about two or three pages typed with double spacing. Letters will be published at the discretion of the editor, managing editor, and Editorial Board.

Deadlines

All material other than scientific should be received prior to the first of the month preceding month of publication.

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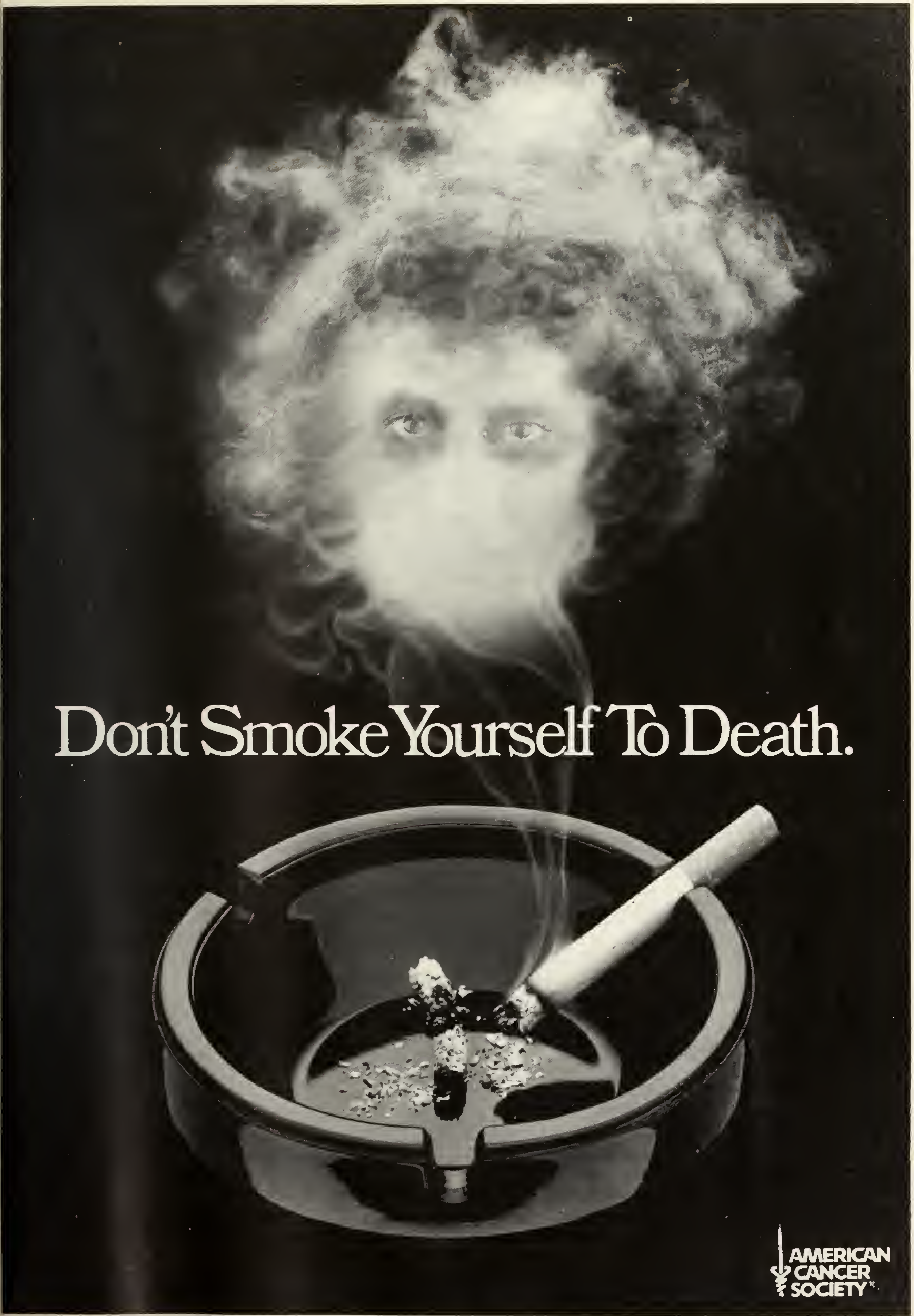
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Cafeteria Workers Instigate Food Fight

"They were armed to the teeth," one surprised customer said. "You should have seen it. Carrots, tomatoes, broccoli everywhere." It seems cafeteria workers all over town have joined **The Great American Food Fight Against Cancer.** Now they're recommending foods that may help reduce cancer risk. The list includes foods high in vitamins A and C, high in fiber and low in fat.

"I love to see people eat healthy," as one server put it. "When I throw a big helping of steamed vegetables on someone's plate, I feel real good inside."

Similar sentiments were echoed by other workers. "When a kid reaches for low-fat milk or yogurt, or grabs an apple for dessert, well, it's just beautiful," said one emotional server.

Experts recommend that people join The Great American Food Fight Against Cancer whether dining out or at home.

The American Cancer Society, sponsor of the Food Fight, has more information. Call **1-800-ACS-2345.**

And, be on the lookout for Community Crusade volunteers armed with shopping lists. Ready? Aim. Chew!

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AGE: **36.**

SPECIALTY: **Orthopedic Surgery.**

MEDICAL COLLEGE: **University of Missouri, 1978**

PRACTICE: **"I recently purchased an established but declining sole practitioner office from a retiring physician. It's a risk, but they say that great deeds are usually wrought at great risk."**

TYPICAL DAY: **"Let the horses out of the corral at dawn and maybe even go for a ride. Then, it's surgery if scheduled and a day of torn ligaments and sprained ankles. The evening finds me on the sidelines of one of our high school sports teams."**

HOBBIES: **Horseback riding and golf. "If I combined activities, would it be polo?"**

LAST BOOK READ: **Missouri: Images of Nature, photographed by Charles Gurche.**

LATEST ACCOMPLISHMENT: **"Testing a protective knee pad I'm developing for use by football players."**

QUOTE: **"Physicians are being deterred from trying new procedures and therapies in patient care. We need to cut the chains and encourage individual innovation."**

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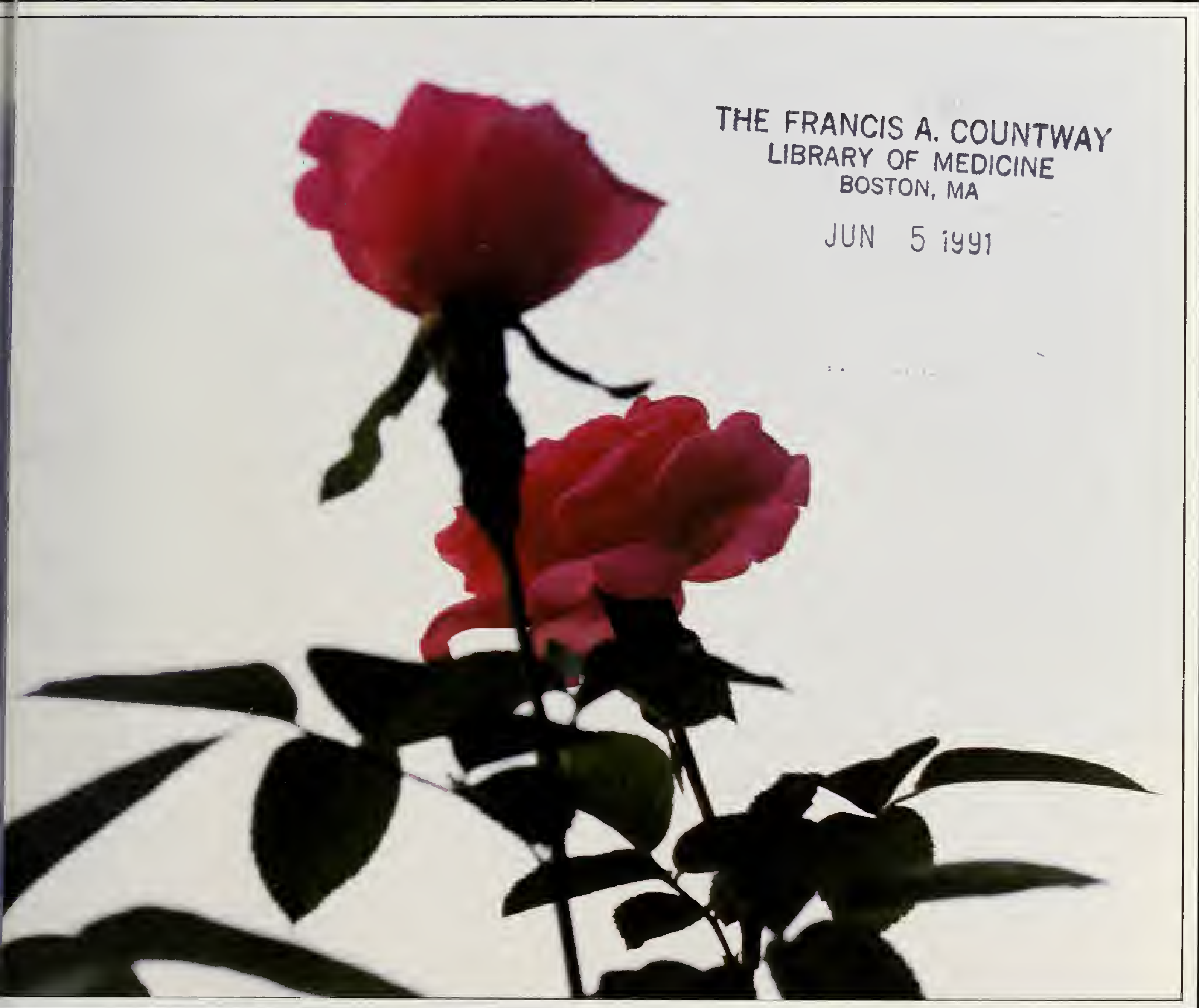

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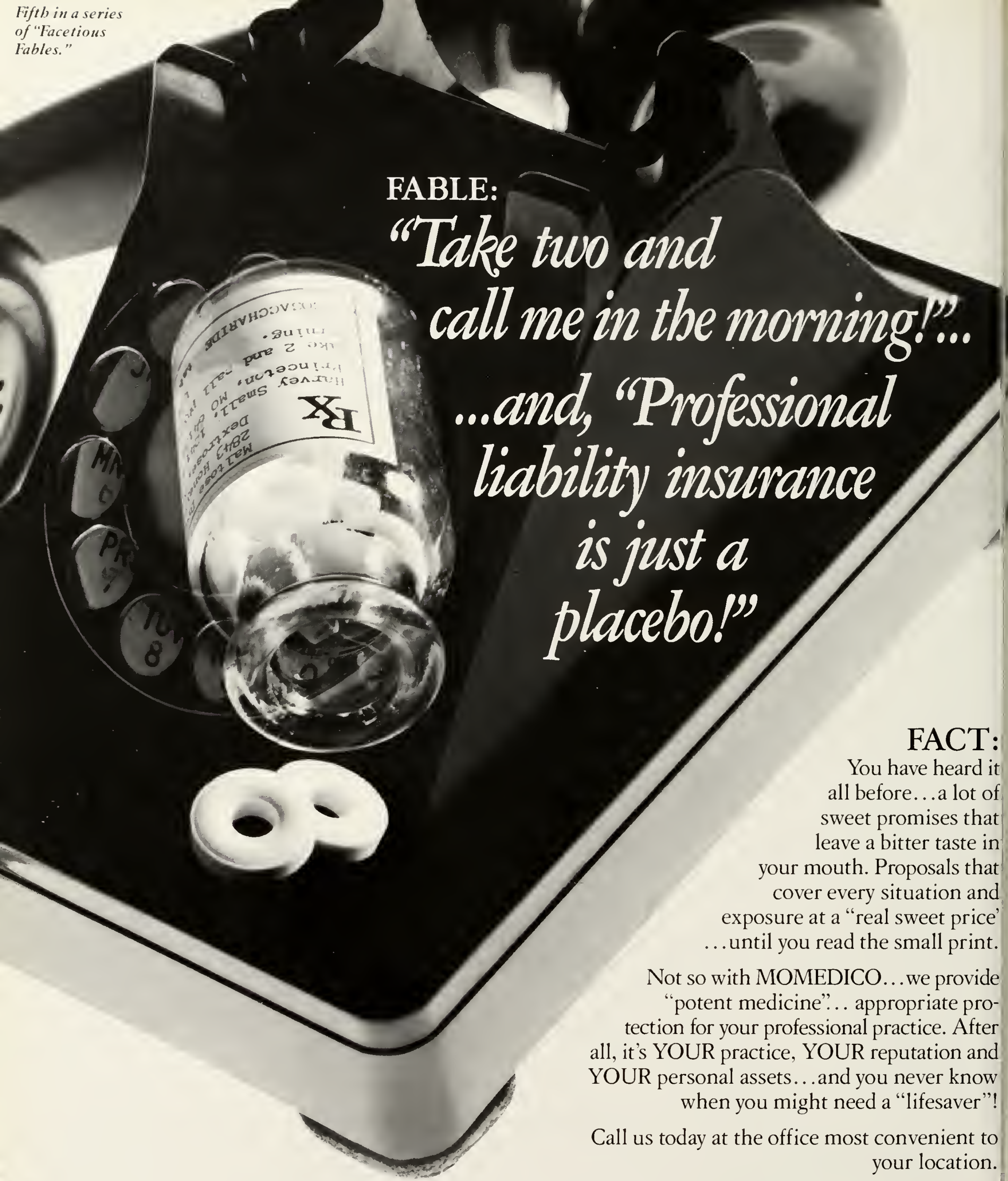
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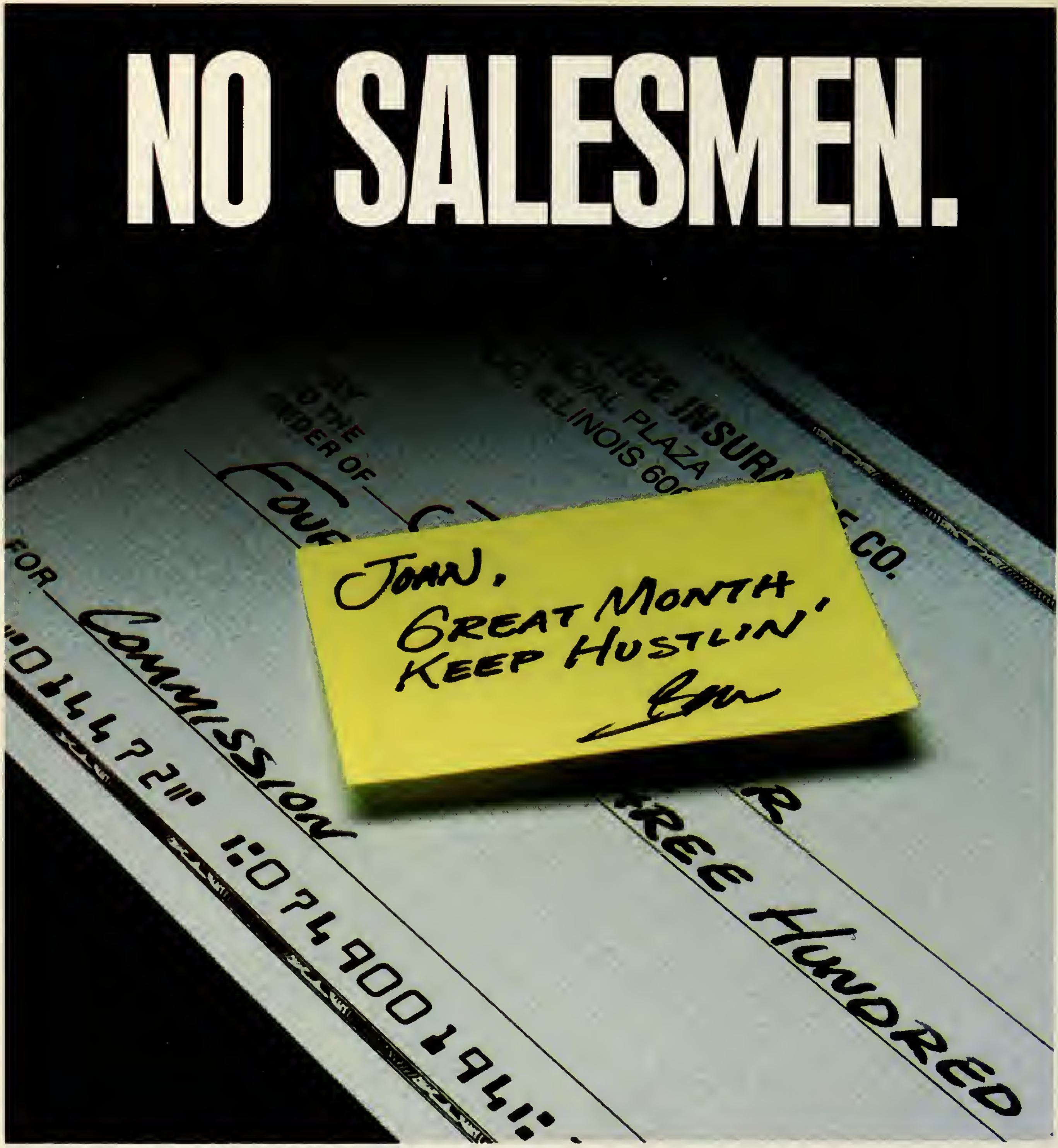
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GUEST EDITORIAL

by S.D. Madduri, M.D.
Poplar Bluff, Missouri

Some of life's events don't seem to make much sense to us. Mortal men have no real answers. But why couldn't life be just a little more fair?

Life "Ain't" Fair

As I stood at the entrance to room 210 during my morning rounds, I knew I had no good news to give to the young man, John (not his real name) who occupied the window bed.

I still vividly remember the day John walked into my office, referred to me for chronic prostatic infection that had not responded to antibiotics. I had known him before, since he lives in our neighborhood and we had exchanged a few friendly hellos and waves whenever I spotted him working in his yard during my occasional jogging endeavors.

John, an insurance salesman, is in his late forties. He told me that he had been having prostate infections for a few weeks and was being treated with only partial relief. In making conversation, he asked about my children, and told me that he had two daughters who go to the same school as my children. His eldest daughter had accepted a basketball scholarship to an Ivy League school on the east coast. When he spoke, I could not help noticing the gleam of fatherly pride in his eyes. His younger daughter had leukemia, currently in remission, and the doctors reassured him that if she had no recurrance within the next three to five years, her chances of being okay were very good. John said that everything in his life seemed to be falling into place, except for, of course, the 'darn prostate infection' that he just couldn't seem to 'break loose.'

John's prostate exam was less than reassuring. I felt a distinct induration that was highly suspicious. I explained to him the need for additional tests including an ultrasound and prostatic biopsy. He agreed to the tests, electing to be admitted as an in-patient as he cannot physically tolerate pain.

The sequence of events following, were far from pleasant. His ultrasound exam showed a rather extensive suspicious area in the prostate. Subsequent biopsy revealed a high-grade malignancy. The prostatic specific antigen (PSA) levels were elevated meaning the cancer had already spread. John had been in the hospital for two days and each time I walked into his room, I had more bad news for him. I hated to look into his pathetic eyes, anxious for a speck of good news, and have to tell him that his magnetic resonance imaging (MRI) scan showed pelvic node involvement, which makes him an unsuitable candidate for radical surgery (the best hope he had). This news only served to drive the prognosis and thus his life expectancy into an unsatisfactory and painfully obvious reality.

As I walked into the room, this morning, I made a quick stop at the door bed and looked at the old man sleeping peacefully. He was in his late eighties, suffering from urinary retention, and was brought from a nursing home. He underwent an uneventful TUR of the prostate and his resected prostate tissue was benign. He is doing

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well and is ready to go back to the nursing home.

Looking at him gave me a sense of discomfort and even guilt. Here is an old man who has lived his full life, has no responsibilities, nor anyone to care for. His only listed relative was a nephew who lived hundreds of miles away. At his age, even a diagnosis of prostate cancer would have made no difference as far as life expectancy or quality of life. When I told him his prostate showed no cancer, he did not respond, nor did he even smile. I doubt if he fully comprehends the events or his surroundings.

I looked at John in the next bed, anxiously awaiting some good news that might allow him to cling tenaciously to his dear life. He has his wife and his children to support. He eagerly looks forward to his eldest daughter attending, and eventually graduating from the Ivy League college. He is aware that his younger daughter suffering from leukemia needs him, his strength.

Why? Why should he be the victim of cancer that threatens to bring his life to a screetching halt, while the old man in the next bed who lived his full life and has nothing to look forward to walks away with life's blessings and Mother Nature's generous hand shake?

I am just a doctor, and I don't have answers to these complex questions. I do know one thing. Life "ain't" fair.

With a heavy heart and a tear trying to trickle its way out of the corner of my eye, I approached the next bed. ■

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A Friend

What is a friend?

Everyone thinks that they have the answer to that one:
a friend is . . . well, you know, someone you like . . . someone who likes you . . .
a person you've got a lot in common with . . . somebody you can be yourself with . . .
someone you can trust . . .

Maybe a friend is all of this and more.

In the words of a song I once knew well, "people come into the fiber of our lives, and then their shadows fade and disappear."

This, too, is part of what friends are — a coming into our lives, touching and changing us, and then — passing through on their journey elsewhere.

For me, friends are people who share conversations with me and when I speak, they care about what I have to say.

I for my part, am intensely interested in what concerns them — except when I'm not, of course. And I can tell them that.

Friendship is timeless. Remember the last time you met a friend you hadn't seen for years? Didn't the years vanish in an instant . . . and wasn't the conversation effortless? Could it be that friendship just is?

The colors of life are more intense where friends are concerned. Take betrayal. The color of pain is much blacker when inflicted by a friend . . . and joy of reconciliation a welcome rainbow.

I make up my own mind when I choose my friends.
My friends are a matter of my design, a community that I gather.
This matter of my choice makes the selections of my friends different from other people I associate with.

Friends are more than acquaintances and less than family.
(Sometimes, though, friends can be closer to us than family, closer in the concerns and secrets that we share.
When you know my concerns and my secrets you know me very well.)

In choosing my friends I also choose who I am and who I will be.
(Is it any wonder parents become concerned when their children "run around with the wrong friends?")

In choosing you as my friend I am designating my self. And in the same way, I participate in your self-design. By knowing you, my friend, I get to know myself better.

I wonder how it is that we came to be friends out of all the people on the planet.
Just pure chance, mere drift of fate?
Or is there a plan in our meeting, speaking, listening, dancing, being together?
Why is it we stay friends?
In the end, after all the analyzing and the wondering, friendship is a Mystery.

Jim Benjamin, M.D.
November, 1990

EDITOR'S DESK

by Donald G. Sessions, M.D.
Editor

Being In Country

I've been hooked by the outdoors since I went to Camp Greenwood in Ellison Bay, Wisconsin when I was 10 years old. I can remember lying in a blanket roll on the shores of Green Bay on freshly cut pine boughs at a state park called Pebble Beach — just looking at the Milky Way and counting shooting stars. Since then no matter the size of the city in which I lived, I always found a way to get into the country. Being in country always slows down my internal conversations and returns me to myself. There is always a sense of having been there before, a sense that it is where I am supposed to be.

I have discovered that I am not alone in my need to be in country. Wilderness writer, Sigurd Olson, wrote:

> "It seems to be part of the hunger that all of us have for a time when we were closer to lakes and rivers, to mountains and meadows and forests, than we are today. Because of our almost forgotten past, there is a restlessness within us, an impatience with things as they are, which modern life with its comforts and distractions does not seem to satisfy. We sense intuitively that there must be something more, search for panaceas we hope will give us a sense of reality, fill our days and nights with such activity and our minds with such busyness that there is little time to think. When the pace stops we are often lost, and we plunge once more into the maelstrom hoping that if we move fast enough, somehow we may fill the void within us. We may not know exactly what it is we are listening for, but we hunt as instinctively for opportunities and places to listen as sick animals look for healing herbs.
>
> Even the search is rewarding for somehow in the process we tap the deep wells of racial experience that gives us a feeling of being part of an existence where life was simple and satisfactions were real. Uncounted centuries of the primitive have left their mark upon us, and civilization has not changed emotional needs that were ours before the dawn of history. That is the reason for the hunger, the listening, and constant search. Should we actually glimpse the ancient glory or hear the singing wilderness, cities and their confusion become places of quiet, speed and turmoil are slowed to the pace of the seasons, and tensions are replaced with calm."[1]

Urban life creates tremendous obstacles to our living in harmony with our background. As ecological educator Steve Van Matre has said, awareness of our natural surroundings is made exceedingly difficult by the accoutrements of an urban existence — from its continual shriek and clatter to the confines of our plasticized, stainless, streamlined buildings.[2] For me the necessary escape begins when I go outside.

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Everyone needs some time to be alone. These periods of solitude, for me in a natural setting, bring back perspective and a sense of timelessness. At the same time our greatest accomplishments as humans are performed through contact with other people. The honing of the mind, the ability to be in loving relationships, and the highest expressions of our humanity require us to be in dialogue with other humans, and at the same time we have an insatiable need for periods of solitude. Recognition of this dichotomy can produce understanding and even some measure of harmony.

When I'm at work I always have a sense of the need for "doing," and the fact that there is always more work to be done. When I am in country there is always something to "do" but there is seldom the urgency or the pressure that surrounds my everyday life. I actually have the opportunity to just be. Steve Van Matre has described a very powerful exercise for "being" in country called seton-watching, after naturalist Ernest Thompson Seton.[3] During a period of solitude in country, he suggests that one locate a comfortable natural setting where you can lean back against something. Sitting motionless in this spot, he recommends that one relax and SETTLE IN. "Become completely motionless. Don't strain, but try not to move at all. Just freeze. Let the natural world sweep over you. Within 15 minutes you should begin to feel as if you are being engulfed. . . . It is not possible to describe the unitive feeling of wholeness which sweeps over the seton-watcher."[4]

It is seldom easy to be in country. There are always activities that seem more important. Yet after being in country I invariably return to my everyday life renewed, revitalized, and with increased enthusiasm for my relationships, my work, and my calling.

References

1. Olson SF: *The Singing Wilderness.* A.E. Knopf, NY. 1985.
2. Van Matre S: *Acclimatizing.* American Camping Association, Bradford Woods, Martinsville, IN. 1974.
3. ibid.
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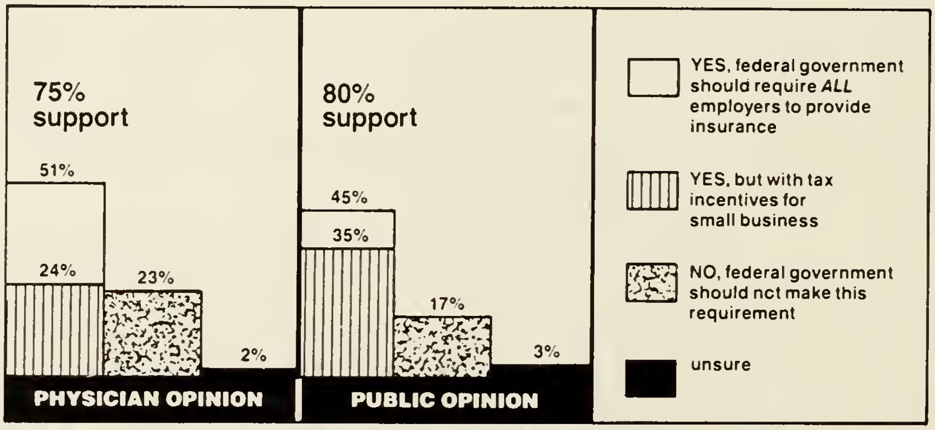

AMERICANS SUPPORT REQUIRED COVERAGE

Doctors and patients agree that employers should be required by law to provide basic health care coverage.
Sources: Dec. '89 Gallup Survey/Physicians Jan. '90 Gallup Survey/Public

A message from The American Medical Association for the Health Access America Proposal

PRESIDENT'S PAGE

by
Dorothy D. Reister, M.D.
MSMA President

If we as members of the Missouri State Medical Association really want to see our membership grow, then we have to be willing to do a little (or even more) recruiting.

ATTENTION:
WANTED NEEDED

Those of you who were at the annual meeting of the Missouri State Medical Association heard me talk about increasing our membership. Admittedly this is a bit more "preaching to the choir," but we are the starting point – the base. Therefore, I am enlisting your help for the good of all of us. **Please read on.**

How do YOU enroll a new member? First, each of us makes the effort to meet the newcomer. Perhaps it is someone joining your practice. If you belong to organized medicine, it should be part of the initial process that the new person apply for membership. It is easy to procrastinate so be sure the application is completed and send it. The more senior member is the mentor and sponsor. Perhaps the first year dues, which are less, could be a reasonable business expense. There are other expenses involved in the integration of a new member of your practice such as office space, announcements and introductions.

Second, make a point of meeting personally the new physician joining your referral source or recipient. Knowing the person allows us to better and more confidently refer our patient. If it is a practice which refers *to* you, certainly that source of referral *should* be acquainted with you.

Third, if your society has a directory, do you use it for telephone numbers of physicians when needed? If you don't find the doctor there, what is your next step? There are three paths – use the yellow pages, call information, or call someone else. If you reach the physician, do you remark to him that you were unable to find him in the society directory, your usual source? From there you can pursue membership by suggesting that the easiest way for a physician to be located is by his being listed in the directory. Tell him you will see that an application is sent to him. **THEN DO IT.**

Fourth, at hospital staff meetings make a point of seeing and talking to non-members. You can talk about advantages of belonging. If in a position to do so, or are so inclined, speak to the staff about local society, MSMA and American Medical Association matters. A show of hands of members will allow the pride of membership to show and you will see who needs information.

Fifth, where there are medical students, residents or preceptors, get to know them. After all, they **are our future**. By being a friend (either on faculty or a non-faculty position), you may help some of these people over a trying time. We are each an example whether realizing it or not and the effect can be like the ripples from a stone tossed into a pond. Perhaps a bit of personal or financial help from the society can make a bit difference to a future member.

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President's Page

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Sixth, remember the Auxiliary as a source of friendship and usefulness to the spouse.

Once each of us has done these, follow through! See that the application has been sent to the physician and to the society. Ask to be notified (or inquire) about the status and acceptance; then take him to a meeting, publicize his membership and find a spot for him in the organization structure in which he is interested. Remember the good golf shot is made better by good follow-through. Part of this will be done with Missouri State Medical Association help. We want to recognize your successes in getting new members, and success will be rewarded. Don't be reticent about letting us know of these successes.

As the handyman gets out his tools, here are some suggestions for the tool box:

1. The new physician in your office; see that he joins.
2. The new physician in a referral group.
3. The directory of physicians — noting the absence of a listing.
4. Hospital staff meetings — a show of hands.
5. Medical students and residents — our future.
6. The MSMA Auxiliary.

Now on to a **BIGGER** and therefore **STRONGER** Missouri State Medical Association. Let's aim for 100%!!

Answer to May President's Puzzle

1/8 1/5 1/4 1/2 1/9

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Answer: 1/7

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Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalmic centers and release of posterior pituitary hormone.

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How Supplied: Oral tablets of Yocon® 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

References:
1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
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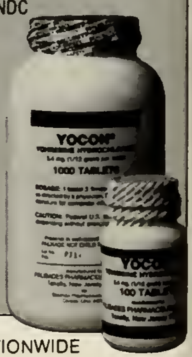

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AUXILIARY MESSAGE

by Mary Hunkeler
MSMAA President

What the MSMA Auxiliary needs from you, the members of MSMA, is the gift of membership to the Auxiliary for your spouse.

The Gift of Membership

Through the years the MSMA Auxiliary has accomplished many goals and has been recognized by the Missouri State Medical Association and at various National Conventions. We have also been honored by Betty Sutter's and Mary Kay McPhee's national presidency of the AMA Auxiliary. Presently, Sandy Mitchell and Chris Bohigian represent us proudly with chairmanships at the national level. The basis of our accomplishments rests on our membership and their belief in promoting the health and well-being of all through programs and projects that address social and health issues.

Our membership now includes medical students' spouses, residents' spouses and physicians' spouses. Yet, we are at a time when it is less common to have a spouse at home. Today, many spouses have careers and professions of their own in addition to a family that gives them little discretionary time for another organization. There are valid reasons for your spouse to join MSMA Auxiliary.

Because its members share common concerns and have a deeper appreciation of the physicians' role than almost anyone else; because we're stronger politically and better informed about health legislation; because we help improve the health and quality of life for ourselves, our families, and others; because we care about our communities with health projects; because we support medical education and research; because we're not all alike, our strength is in our diversity; because we have fun and fellowship together; and because we want to become friends with your spouse.

What we need from the physician members of MSMA is the gift of membership for your spouse. It is an opportunity that will benefit your spouse, your family, your community and yourself.

Please fill out the membership form below.

Missouri State Medical Association Auxiliary
Membership Form

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SPECIALTY ____________________
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MAKE CHECK PAYABLE TO: MSMA AUXILIARY
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1703 West Cape Rock Drive
Cape Girardeau, MO 63701

MONETAMED PROFILE

THOMAS P. DOYLE, M.D.

HOME: Springfield, Missouri.

AGE: 36.

SPECIALTY: Orthopedic Surgery.

MEDICAL COLLEGE: University of Missouri, 1978

PRACTICE: "I recently purchased an established but declining sole practitioner office from a retiring physician. It a risk, but they say that great deeds are usually wrought at great risk."

TYPICAL DAY: "Let the horses out of the corral at dawn and maybe even go for a ride. Then, it's surgery if scheduled and a day of torn ligaments and sprained ankles. The evening finds me on the sidelines of one of our high school sports teams."

HOBBIES: Horseback riding and golf. "If I combined activities, would it be polo?"

LAST BOOK READ: Missouri: Images of Nature, photographed by Charles Gurche.

LATEST ACCOMPLISHMENT: "Testing a protective knee pad I'm developing for use by football players."

QUOTE: "Physicians are being deterred from trying new procedures and therapies in patient care. We need to cut the chains and encourage individual innovation."

PROFILE: Independent and open-minded. "Living in the country, I don't feel hampered by social convention. I can work on new ways of doing things."

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by Janice K. Woerth, Ph.D.

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c/o *Missouri Medicine*
P.O. Box 1028
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Or call her direct:
202/363-1780

Although your name will not be used in the journal, please include your name and phone number so that Dr. Woerth may contact you if she needs additional information to answer your question.

Dear Dr. Woerth:

Every year I receive from Medicare the profile for my fees. My office manager says that the profile is important for our charges. Can you explain?

Dr. C.P.

Dear Dr. C.P.:

The Medicare profile is an important billing tool for your office, whether or not you participate with Medicare. The first column of the profile lists the service you perform for Medicare patients. The second column is your customary fee for these services. The customary fee on your 1991 Medicare profile represents your charges from July 1, 1989 through June 30, 1990. The third and fourth columns are the prevailing rates for participating and non-participating physicians, respectively. The fourth column (the non-participating physicians' prevailing), as required by Federal law, is 5% less than the third column (the participating physicians' prevailing fee). Finally, the fifth column is the Limiting Charge that is the maximum amount that a non-participating physician can charge a Medicare patient. The Limiting Charge is the fee most non-participating physicians use as their current fee. While it is legal for a non-participating physician to charge Medicare patients less than the Limiting Charge, it is illegal to charge Medicare patients more than the Limiting Charge.

While a physician has control over his/her customary fee, Congress controls the prevailing fee. Each year, Congress decides how much the prevailing rate will be increased. The amount of the prevailing increase is called the Medicare Economic Index (MEI). Generally the MEI is low, often increasing only 1%-3% per year. Some years there is no increase for prevailing fees or only prevailing fees for specific services are increased.

Medicare uses each physician's profile to determine the allowable amount to be paid for services rendered. The allowable amount is the lowest of three fees: your charge today, the customary or the prevailing rate. Given that Congress controls the prevailing fee, it is most often the lowest of the three fees.

Using your profile then, you can determine Medicare's allowable for your services. Remember, for participating physicians and for a non-participating physician who accepts assignment, Medicare pays 80% of the allowable and the patient pays the other 20%. For non-participating physicians not accepting assignment, Medicare also pays 80% of the allowable while the patient pays the other 20% plus the difference between the Limiting Charge and the allowable.

By knowing the allowable amount Medicare will pay for your service, you can calculate the amount that the patient owes you for your services. If you choose, you can collect this amount at time of service. By collecting the Medicare patient's portion of the bill at time of service, you improve your case flow and save the cost of billing the patient. It is legal for participating physicians to collect the 20% their patients owe at time of service. ■

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For Your Information:

Traveler's Diarrhea

Known to all as "Montezuma's revenge," "Turista," or the "Aztec two-step," traveler's diarrhea remains the most common and persistent medical complication of international travel. Read on to learn what you need to know about this dreaded condition, especially if your travels this summer will take you beyond the U.S. border.

Anywhere from 20% to 50% of those who travel to developing countries will develop traveler's diarrhea during their trip, or shortly thereafter.

Although most victims regard it as a mere nuisance, about 40% of travelers will either change their itineraries or return home early as a direct result of traveler's diarrhea. By following a few simple precautions, most tourists can avoid this "souvenir" from exotic lands.

Causes and Patterns of Infection

Generally, traveler's diarrhea is seen in residents of developed countries who travel to developing countries with poor public sanitation. Only rarely do travelers from developing countries acquire diarrhea when traveling to other developing nations.

The cause of traveler's diarrhea is based on what physicians call **intestinal immunity**.

All of us contain helpful bacteria within our digestive tract. The species and strains of bacteria within our GI tract reflect the kinds of bacteria found in our local food and water. Because of the greater emphasis on public sanitation in the United States, our intestines do not contain some of the bacterial strains seen in inhabitants of other countries. Therefore, travelers from developed nations have little or no immunity to bacterial strains common to developing countries, unlike the inhabitants of those countries.

The risk of traveler's diarrhea depends on where travelers eat. Those who dine exclusively in private homes have a low risk; those who dine at major hotels have a somewhat increased risk. Individuals who eat at small restaurants, cafeterias, and who purchase food from street vendors are at the greatest risk of acquiring traveler's diarrhea.

Fifty percent of cases of traveler's diarrhea are caused by the *E. coli* species of bacteria. Many strains of *E. coli* produce a mild toxin which causes watery diarrhea, cramps and a low-grade fever (under 100.5°F). Symptoms usually last 4-7 days, causing patients to produce 10-12 watery, formless stools per day.

Other bacterial culprits are *Campylobacter* and *Shigella* species, accounting for about 20% of cases. Viruses, especially rotavirus, can cause another 10% of cases. Finally, a microscopic, water-borne parasite, *Giardia lamblia*, makes up another 10% of cases. *Giardia* is particularly worrisome, as it is fairly resistant to chlorination, and can be found even in treated water supplies. Unlike other forms of traveler's diarrhea, *Giardia* infection is associated with bloating, belching, and gas, sometimes lasting several weeks.

For Your Information — Traveler's Diarrhea

If You Can't Peel It, Boil It, or Cook It — Forget It!

Travelers need to recognize the risks posed in local meals and strictly adhere to the prudent eating and drinking habits outlined below.

1. The traveler's water supply is the single greatest hazard to acquiring diarrhea. In many countries, one must assume no tap water is safe to drink. "Safe" water includes:

- water that has been boiled for five minutes prior to serving
- piping hot coffee and tea
- carbonated beverages
- commercially bottled and labeled sparkling or mineral water
- alcoholic beverages without added water (beer, wine, brandy, "neat" whisky.)

Commercial water filters do not guarantee water purity because of wide variations in the quality of the filters themselves. Halogenation (chlorination) of water by use of iodine or chlorine tablets is safe if done properly, but proper halogenation is difficult unless done in large quantities at a fixed location such as a trading post, travel station, or permanent camp.

2. Do not add ice or water to otherwise save drinks.

3. Avoid using tap water for tooth brushing or face washing. Even this small amount of water can introduce harmful bacteria.

4. Avoid uncooked foods such as salads and fresh fruits, unless the fruit can be peeled by the traveler.

5. Most foods that are cooked and served hot are considered safe. However, cold soups and food served lukewarm should be avoided. Dairy products may not be adequately pasteurized, and occasionally harbor tuberculosis. Breads are generally safe to eat, but pastries with icing are not. Fresh meat, fish, and seafood dishes should not be eaten unless well-cooked.

6. Bismuth subsalicylate (Pepto-bismol) is one of the most effective drugs for prevention of traveler's diarrhea, as well as the most inexpensive and widely available. Studies have shown that this drug "binds up" toxin-producing *E. coli* bacteria, preventing their growth within the intestine. Because large doses (four teaspoons four times per day) are necessary, the chewable tablet form is recommended at a dosage of two tablets four times per day.

Treatment

Because the main complication of traveler's diarrhea is dehydration, therapy is aimed at replacing lost fluid, salt, and minerals through either a "generic" oral rehydration solution, or commercial solutions such as Gatorade. A satisfactory substitute can be made by adding four tablespoons of table sugar, 1/2 teaspoon of table salt, and one teaspoon of baking soda to a liter (slightly more than a quart) of water.

Antibiotics and drugs that slow the GI tract, such as diphenoxylate (Lomotil) and loperamide (Imodium) are useful in shortening the course of traveler's diarrhea, but should not be used as a preventative. Studies show that they are not at all effective in preventing traveler's diarrhea, and may actually increase the risk of acquiring it. Individuals who develop diarrhea with high fever that lasts more than 10 days should seek medical treatment. ■

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SPECIAL ARTICLE

AMA National Leadership Conference

Speech by

Alan R. Nelson, M.D.

Past President, American Medical Association

Senator Rockefeller has outlined the Pepper Commission's prescription for improving the health of health care in this country.

Let me say at the outset that we agree with the basic principles, and most of the specifics of his commission's report, and we are allied in our determination to find constructive approaches to deal with problems that everyone knows exist.

Let me propose four assumptions with which most of us agree:

1) At its best, medical care in the United States is unsurpassed. Students and physicians from throughout the world come here to train if they can. Our centers of excellence have a global patient base. Few of us would choose to have a serious illness in another country, if we had a choice. Eighty-seven percent of us have access to a good health care system.

2) In the United States, 31 million people lack adequate health insurance, and this is a disgrace for a country as rich as ours. No woman should complete her pregnancy without prenatal care. Everyone should be immunized. Everyone should have cost-effective disease prevention screening.

3) The present escalation of health care costs in the United States is unacceptable and must be altered.

4) Significant change (not just tinkering) in the way medical care is provided and financed is necessary and desirable.

I will give my view of each of these dimensions of health care — access, cost, quality — and outline where I think we should go in the future.

First, let me begin with a brief historical review, because efforts to enhance access to health insurance are not a recent phenomenon.

More than six decades ago, in 1926, growing concern about the costs and distribution of medical care prompted the formation of the Committee on the Cost of Medical Care. It was chaired by a former president of the AMA, **Lyman Wilber, M.D.**, who became President Herbert Hoover's Secretary of the Interior. This blue ribbon committee prepared 27 research reports, the last in 1932, and expressed alarm about the spiraling cost of health care ($3.66 billion per year, or 4% of the national income). It also gave the first reliable breakdown of the medical dollar (29.8 cents paid to physicians versus 20 cents in 1989).

In 1935, the California Medical Association endorsed compulsory health insurance, as had the American College of Surgeons in 1934. President Roosevelt's initiatives in this area were stopped by World War II.

In 1944, 68% of the public thought it was a good idea for social security to also pay for doctors and hospital care, but only 51% of those polled were willing to pay higher social security taxes to fund it.

In 1950, the AMA conducted an intense campaign against what it called socialized medicine; in 1965, we warned that estimates of Medicare costs were badly understated; and in 1970, President Nixon said that his administration must confront rapidly escalating costs. "We face a massive crisis in this area," he said. "Unless action is taken within the next two or three years, we will have a breakdown in our medical system."

In 1970, three-fourths of the public agreed with the statement, "There is a crisis in health care in the United States." That year, the AMA introduced its national health insurance proposal, and at the AMA Leadership Conference in about 1975, Bill Fullerton, staff of the House Ways and Means Committee, surprised his audience by saying he didn't believe we would have national health insurance until 1978. Everyone expected it sooner.

Beginning with the election of President Ronald Reagan, we saw new optimism and an assertion that competition and voluntarism would solve the problems of cost and access. Instead, predictably, we have seen increasing costs, eroded professional freedom, and an unacceptable larger number of patients unable to receive the full range of needed services because they have no insurance.

What are the environmental factors that must be considered as we propse programs for needed health care reform? There are three that I wish to address: We are a media-driven society; we have a budget-driven government policy; and the direction of policy is often determined by special interests.

Media and electronic communications capability have completely changed the way public policy is formulated, framed, and advanced. It sometimes seems that Bryant Gumble has more influence than Louis Sullivan, unless Dr. Sullivan uses Mr. Gumble.

Imagine the previously unimagined ability to influence the dynamics of global power that CNN showed in the Gulf conflict. Saddam quickly figured it out. Wolf Blitzer became an unlikely household word.

The thirst for health-related information seems unquenchable. We want to know how to take care of ourselves.

Social policy regarding health care is similarly influenced by the barrage of health-related information. *JAMA* changes its day of publication to better use the week's time frame for the coverage; my patients find out about a gene-related osteoarthritis before the information is published in peer-reviewed literature (and the story is misreported in print and electronic media in a way that misleads my patient's expectations).

Miracles are heralded, but never with a fiscal note. A child has a successful liver transplant, and it is reported as a medical miracle. The family sues the hospital because it can't find a donor for another transplant after the second one fails, and it is reported as an *interesting* legal case, but no one talks about the cost of these procedures. Bone density screening for all women to determine osteoporosis risk, or bone marrow transplants as a cure for AIDS are tossed on the nightly news with no consideration of what it would cost to make those technologies available.

And as people hear more health-related information, as they hear conflicting recommendations about, for example, mammogram screening, or estrogen use, as they hear information that is downright wrong from quacks on radio-talk shows, for instance; as they hear about inaccurate pap smear screening or fatigue impaired residents, they become simultaneously enamored and distrustful of our technology. Nonetheless, they want the miracles, often self-refer, pick from the health-care menu (one from Column A, two from Column B), want the best and want it now.

We have a budget-driven government policy. The Office of Management and Budget (OMB) seems to run things within the Administration. "Read my lips" softened a bit with sin taxes last year, but that so-called revenue enhancement is peanuts in the face of the savings and loan bail-out, and a new price tag on the Gulf War. Talks of confronting the deficit with a capital gains tax cut still sounds like voodoo economics to many.

We are talking about access to care today, and we might as well do it with realism and clarity and discuss what various proposals would cost, and how we as a nation would pay for the program we would enact. That fact alone makes us and the Pepper Commission unique among the many groups that want free care for all with no honest projection of what that would cost.

What special interests are driving health policy?

Let's start with the militant affluent elderly. Their power was amply demonstrated by the pressure they successfully applied to Congress to repeal the catastrophic protection legislation. They turned their backs on the needs of their less fortunate fellows because of a maximum $800 additional premium per year for the most wealthy. And how long will the transfer of debt to the young working couple continue as cost shifts from government funded programs continue unabated?

Labor was a powerful force in the 70s, fell on hard times in the 80s, is now again an important player, and will become more important because the large middle class is searching for an advocate, as it finds business cutting corners in a way that hurts.

But the special interest that will force change – perhaps drastic change, perhaps some of it unwise – is business. Business has the means, the knowledge, and is developing the organizational structure to put capping systems in place as it becomes more frustrated and more desperate about its inability to control its health care budget.

And *our* special interest group. What is its role, and does it have any clout? We most certainly have a responsibility to be a constructive, credible participant in this environment of accelerating change. But our ability to influence policy in directions that best meet the unique needs of Americans, while at the same time preserving fundamental values of the profession, depends on our ability to forge consensus, within and outside the profession. And that is why we have developed Health Access America. We are a player in these times of inevitable change.

Let me return to our earlier basic premise: Fundamental change in our health care system is necessary and desirable. The key questions are, "What kind of change is needed?" and "How do we achieve it?" A good deal of attention has been given to systems that have developed in other industrial countries, and speculation about their suitability in the United States continues. Should we attempt to implement the Canadian or German, or Swedish system for instance?

First, I believe it is undesirable to do so, but, more important, it is not feasible. Americans are uniquely American, have different expectations, and have a different relationship with their government. We are not likely to increase taxes enough to adopt the Canadian health system (up to $330 billion), Americans don't like to stand in line (they'll sue before they queue), and our experience with Medicare makes us laugh at the assertion that government would do it more simply. Government can't do anything simply. Can you imaging the Medicare Data System being dismantled if we have a government based single-payer system? Of course not.

Not only would the tax burden of a single-payer system, free at the point of entry, be unacceptable, but total costs would increase even more because demand would increase, administrative costs would go up, and Americans won't wait for services they want and need.

That is why we must lead, and provide mechanisms to deal with the faults in our system with rational, doable solutions that permit incremental implementation with the highest priority problems addressed first – solutions that retain the strengths of our current system: Centers of excellence, an investment in research, pluralism, and free choice. We must deal with the access problem using the AMA's proposal – Health Access America, or something like it. The elements of the Pepper Commission's report aren't far off.

Our proposal calls for the United States to:

1) Expand the Medicaid program to cover everyone below the regional poverty level with a decent package of benefits that is uniform across the country.

2) Increase employer-provided private insurance for the two-thirds of our uninsured who are employed. Phase it in and give tax credits to small business.

3) Set risk pools in place in each state to cover the uninsurable.

4) Provide catastrophic coverage and basic preventive services as part of a basic benefit package.

5) Establish innovative approaches to provide long term care. These may include provisions for asset protection such as those proposed by Congressman Kennealy, tax law changes to permit IRAs for health (to be drawn down for long term care), and tax deductibility of premiums paid for long term care insurance.

Cost containment dominates our thinking and it should. Here are some strategies that should be supported:

1) Appropriate cost sharing for those who are able to pay. This is the most important factor in rationalizing demand for services.

2) We should fully implement the physician payment reform legislation passed last year – a budget-neutral RBRVS. Everyone knows that some inequities exist. The public focuses on only the high side. We can insist on fairness and achieve fairness if we work together.

3) We must reduce the administrative costs. To do this, we should:

- Eliminate utilization management that doesn't work. Some second opinion programs simply increase costs.
- Revise conditions of participation for hospitals and eliminate nonsense such as co-signatures on the record and make-work committees; and
- Examine each administrative action against tests of relevance and cost-effectiveness.

4) Cut defensive medicine costs – I don't set out each day to increase costs, but if I'm worried about "failure to diagnose" liability, cost consciousness goes out the window and I order what I need to support my clinical decision if I'm later challenged in court.

5) Let's get the Justice Department and FTC off our backs so we can adjudicate fees, and present ourselves as willing and able to act on patient complaints.

6) Support effectiveness research and get a better understanding of geographic variation, their reasons, and

where, within the range, the optimal lies.

7) Practice parameters are strategies to assist physicians in better and most cost-effective patient care. They promise to enhance value. Some will reduce unnecessary care. If incorporated as part of a continuous improvement process, they should enhance quality.

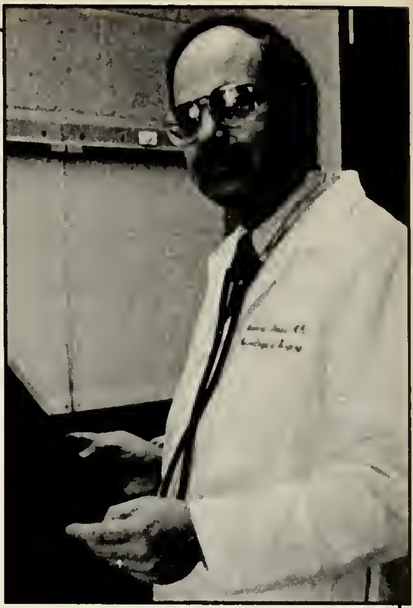
8) We must work toward better use of nursing resources in the hospital. Nurse salaries are an increasing component of hospital costs. And nurses should be doing tasks that require their level of skill and training.

9) We, as health workers and as a nation, must invest in and place more emphasis on health promotion and disease prevention, including better patient education – beginning with health education in the schools, including sex education at the right time. Tobacco ads make no sense. How can we justify spending $3 billion a year to promote a product that kills 350,000 of our people each year?

To summarize, our system has serious problems, along with the admirable strengths that serve 87% of us well. We must confront and correct the problems. We must set our priorities and fulfill our promise to the poor, and increase coverage at the work site. It will require money to do it, but nowhere near as much as it would cost to provide a single-payer system free at the point of access.

Now is the time to do what needs to be done. You are part of the process of building consensus that will get it done. ■

Editor's Note: Dr. Nelson gave this speech at the AMA National Leadership Conference, held at the Fontainebleau Hotel in Miami Beach, Florida on February 16, 1991.



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SPECIAL ARTICLE

Don't Be Penny Wise and Policy Foolish

Brian J. Niceswanger, J.D.
Kansas City, Missouri

Because there appears to be substantial growth among the competition in the Missouri physician professional liability insurance market, physicians need to be fully informed when considering all of the factors that go into selecting a malpractice carrier. The author addresses some of these factors here.

Right now Missouri physicians enjoy a competitive professional liability insurance marketplace. Recent contact with the Missouri Division of Insurance confirms that no less than 29 insurers are authorized to write medical professional liability insurance in the state at the present time. (Twenty-four companies write nursing coverage and 21 offer coverage for dentists.) With this increase in the number of companies writing coverage in Missouri has come offers of lower premiums. As the title of this article indicates, there are factors beyond merely the insurer's Best Rating and premium cost that should be taken into consideration when selecting a malpractice policy.

Experience in the State

A preliminary factor to consider when deciding to go with a new insurer is that we are presently in a "soft" market. This generally means that claims are down, making it possible for new insurers to enter the market and be relatively certain that for a short period, they may generate substantial premium with relatively low risk exposure. Existing insurers, on the other hand, have claims pending from past years that remain as significant potential liabilities. The result is that new companies can normally enter the state writing policies around 60% to 70% of existing company premium for similar coverage.

Routinely, insurance analysts will forecast an evolving "soft" market where premiums on new insurer's policies will increase about 15% per year until the premiums are roughly equal to existing companies. At the same time, existing companies may attempt to reduce premiums to match competition. Eventually, the marketplace will stabilize and reach an equilibrium.

The risk of opting for a new company is that these same companies may exit the state as quickly as they entered when the market becomes more hostile, which it will inevitably do. The physician, or group, left uninsured following withdrawal of a carrier is then left with the problem of securing coverage at a difficult time. Provided coverage can be located, which is not always the case, the cost will normally be significantly higher than existing insured physicians of the company.

This is due in part to discounts provided by the insurer for long-standing clients, and also to the potential risk faced by the insurer in accepting new risk in a bad market.

A malpractice insurance company's track record in the state is also important. Of the 29 companies presently authorized to do business in Missouri, many have been in the state less than five years. Recently, an insurer attempting to break into the Colorado market provided assurances to potential insured physicians that premiums would remain low, and enticed many physicians to leave their existing insurers. After only a short period, premiums increased dramatically. Fortunately, after litigating the issue in Colorado, the insured physicians were able to obtain relief from the court based upon the insurer's conduct.

The size of the insurer's "risk pool" of insured physicians in Missouri is also extremely important in the event claims increase. Insurers with substantially smaller numbers of insured physicians must pass along increased claims more quickly in the form of higher premiums. Higher premiums may result simply because there is not a very large body of insured physicians to adequately pass the risk along. In this situation, it is likely that older, more established insurers with large risk pools will be able to retain premiums at a lower level.

The Missouri Division of Insurance is an excellent source of information on insurers writing coverage within the state. The Division maintains annual financial figures on all malpractice insurers licensed in Missouri, number of years licensed in the state, as well as files on market conduct and complaints on all insurers, and this information may be obtained directly from the Division's Consumer Affairs Division. Upon request, the Division of Insurance will provide residents with the above information at little, or no cost. Although less formal, you may also learn a great deal about a company's policies and practices from visiting with attorneys in the malpractice defense bar in your area.

In summary, check out the Missouri history of any company you are considering. Be as sure as possible that the company is here to stay and is committed to increasing its market in order to assure some balance against increased claims expenses. Prior to purchasing any new policy, research the company's track record in Missouri and other states. This may include checking with state regulatory and professional agencies, including those in the insurer's state of domicile.

Location of Insurer and Claims Department

Another factor to consider when purchasing professional liability coverage is where the company writing the policy is located, as well as where the claims department is located and where claims are handled. Of the 29 authorized medical malpractice insurers, the vast majority are private, out-of-state stock companies. There are only a handful of Missouri companies writing professional liability insurance. As discussed below, there are normally a number of benefits to insuring through a company headquartered in Missouri.

Frequently, the agent writing for an out-of-state insurer will have nothing to do with claims. Claims may be administered out of a regional, or out-of-state national office. Since the reason for purchasing professional liability coverage is to safeguard against liability when a claim arises, it is frustrating to experience poor administration of your claim. The likelihood of problems with claim administration tends to increase in situations where regional or national, rather than local, claims centers are used. Therefore, having your claim handled locally is an advantage.

An equally important aspect to local administration is that claims people living and working in the home state normally have greater familiarity and knowledge of Missouri laws. In these days of "tort reform," it can be significant to make sure that the claims representative handling a claim is abreast of the latest developments in the law. When *any* payment is going to be reported to the National Practitioner Data Bank (NPDB), the last thing the physician needs is a claims representative who pays or overpays in a case, because he or she didn't know the particular law of the forum state.

Important Changes In Contract Provisions

Many insurers are changing provisions relating to settlement and removing the insureds right to settle. Important new considerations in selecting a malpractice policy indirectly arise from the recent creation of the NPDB and the requirement that *any payments* for professional negligence be reported to the Bank. NPDB can be accessed by numerous entities, including hospitals, insurance departments, and state licensing agencies. At the present time, we understand that inquiries are coming into the NPDB at a rate of 10,000 a week. While processing is a bit slow now, there is obviously a substantial pool of users who will be accessing this data regularly. The plaintiff's bar is aggressively seeking to obtain access to NPDB for the general public as well.

With the advent of NPDB, the insured physician's reputation is *immediately* affected by the settlement of any case or claim because of the reporting of such payment to the NPDB. In order to keep premiums low, many insurers in the market will be faced with situations in which it is cheaper to pay a nuisance settlement than to defend a claim. The *only* way a physician may assure that a claim is not paid merely based upon a business judgment that it would be cheaper to pay nuisance value than to defend, is to require a *consent provision* in the malpractice insurance policy. This consent to settlement provision is the physician's safeguard against having a claim settled against his or her wishes, and unfavorable payment information reported to the NPDB.

In 1989 the Supreme Court handed down a decision in State ex rel. Woytus v. Ryan, prohibiting defense counsel from informally investigating medical malpractice claims. Defense lawyers are now prohibited by the physician-patient privilege from investigating prior and subsequent treatment by meeting informally with treating physicians. Aside from bestowing a significant practical advantage to the plaintiff, this decision is responsible for a significant rise in defense costs, because now every health-care provider, be it physician, nurse, technician, or whomever, must be deposed.

Another change afoot directly affects the amount of coverage available for a loss. A policy term that is growing increasingly popular among the insurance community is including the cost of defense within the overall policy limit coverage. Under such a provision, an insured physician risks diminished coverage by litigating a claim, since the initial policy coverage is reduced every time a defense cost is incurred. Of course, with litigation costs potentially running into six figures, this provision may significantly reduce coverage available for a loss.

As an example, under a traditional policy providing $500,000 in coverage, the insurer would pay up to a $500,000 claim. Even if litigation were filed, attorney fees and defense costs would not come out of the policy coverage and a full $500,000 would be available to satisfy a judgment. Under a policy where coverage also includes defense costs, if a physician is sued for malpractice, it is entirely possible $100,000 in litigation expenses could accrue. Under this kind of policy, the amount of money available to actually satisfy a claim or judgment would be constantly reduced by the amount of defense costs. In the above example, a $500,000 policy with $100,000 in litigation costs would result in only $400,000 being available toward payment of a judgment.

This policy language also has a potential to undermine the physician's relationship with his defense counsel, because it is in the physician's best interest to save litigation costs. The defendant physician can easily become concerned with costs associated with properly staffing the file. At the same time, defense counsel functions best when allowed to incur costs necessary to fully prepare the defense. There would probably be few physicians who would like to be in a position of pinching pennies on defense costs when their professional credentials and reputation are questioned.

There are obviously a multitude of potential contract provisions that warrant discussion, and only a few of the significant concerns have been mentioned. Most companies will provide an evaluation against competing policies, and it doesn't hurt to receive evaluations from several companies. One caveat — get it in writing. If there are specific provisions of concern, talk it over with your attorney.

Future Likelihood of Increased Claims

Within the last three months, there have been two medical malpractice verdicts in Missouri worth more than $20 million. In the same period, there was another malpractice verdict worth more than $20 million just across the state line in Kansas, as well as record-setting verdicts in automobile cases of $23 million in Greene County, and $46 million in Jackson County. In short, while the malpractice insurance market has recently been good, indications are that juries stand ready and willing to return sizable verdicts that will ultimately result in larger premiums and fewer insurers writing coverage.

There may be reason to be optimistic that Missouri malpractice premiums will stay competitive. In April, the Supreme Court in Mahoney v. Doerhoff, upheld the constitutionality of the Missouri medical malpractice affidavit requirement. The plaintiff's claims had been dismissed for failure to comply with the affidavit requirement, and the plaintiff raised multiple constitutional questions on appeal. In its decision, the Court addressed plaintiff's constitutional claims point by point, and rejected them. This is a *very* important case because at this writing, there are five constitutional challenges pending to Missouri's malpractice reform statutes. When Mahoney is combined with an earlier decision in Missouri upholding the constitutionality of a shorter statute of limitations in the malpractice area, one can't help but be optimistic about the prospects for all of the malpractice statutes. This may help keep insurance costs low.

While we can be cautiously optimistic about tort reform, several recent judicial developments in Missouri also point to the likelihood of increased malpractice litigation in the very near future. The Missouri Court of Appeals recently recognized a cause of action for the wrongful death of a *non-viable* fetus (Rambo v. Lawson, et al) as well as a cause of action for emotional injury to parents, where the parents actually observe negligent medical treatment to their own child (Asaro v. Cardinal Glennon Medical Hospital, et al). Fortunately for physicians, the Supreme Court reversed the lower appellate courts in both the Rambo and Asaro cases, but these decisions clearly evidence a willingness on the part of the lower appellate courts to expand the parameters of physician liability. Another recent case allows the corporation that provided emergency room doctors under contract with a hospital to be held vicariously liable for the negligence of the emergency room physician (Keller v. Missouri Baptist Hospital of Sullivan, et al). It is clear that a movement is underway by the plaintiffs' bar to expand the parameters of Missouri malpractice law.

Conclusion

Of course, which insurer is right for you, or your group, is a decision that should be made based upon consultation with your own insurance representative, accountant(s) and legal counsel. One fact is abundantly clear: the company's financial strength and premium cost are only starting points in this analysis. It is hoped that the considerations discussed here will be helpful in more fully evaluating the advantages and disadvantages of purchasing malpractice insurance from any particular insurer. Remember, when the sheriff knocks you need a company and a policy you can depend on: Don't be penny wise and policy foolish.

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The Present Role of Prostatic Specific Antigen (PSA) As a Tumor Marker in Carcinoma of the Prostate

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Prostatic specific antigen (PSA) is an important tumor marker for prostate cancer and is being used more frequently in men suspected of having this disease. Although PSA cannot be recommended by itself for either screening or staging of prostate cancer, its present role is discussed by the author.

Prostate cancer is currently the most commonly diagnosed malignancy in American males, and the second leading cause of cancer-related death. A total of 106,000 new cases were estimated to be diagnosed and 30,000 men were estimated to die from this disease during 1990.[1] At present, the only way to improve survival is through early detection.

The finding of a sensitive and specific tumor marker for such purpose is quite attractive. A multitude of different markers have been measured and quantified over the years, the best known being prostatic acid phosphatase.[2,3] Unfortunately, although initially promising, these markers' lack of specificity has been disappointing. In 1979, Wang and associates,[4] at Roswell Park were able to isolate and purify a glycoprotein with a molecular weight of 34,000 KD, which is specific to both normal and malignant prostatic tissue. The substance is responsible for the liquefaction of the seminal gel formed after ejaculation. This polypeptide was named prostatic specific antigen (PSA). Over the last decade, great interest has been placed in this tumor marker as the best possible screening modality for carcinoma of the prostate. Serum levels of PSA can be determined by either a monoclonal (Hybritech Tanden-R, San Diego) or polyclonal (Yang Pros-Check, Bellevue, Wash.) assay. The normal values for each technique ranges from 0 to 4.0 ng/dL for the monoclonal and 0 to 2.5 ng/dL for the polyclonal. Despite these differences in normal ranges, an absolute advantage of one over the other has not been established. Causes other than carcinoma that can lead to an elevated PSA level include benign prostatic hyperplasia (BPH), acute or chronic prostatitis, prostatic infarction and any form of prostatic manipulation.[5] However, a recent study by Brawer[6] showed no significant change in serum PSA after a digital rectal exam (DRE).

Our approach to measuring PSA levels takes into account PSA's half-life of 2.2 to 3.15 days.

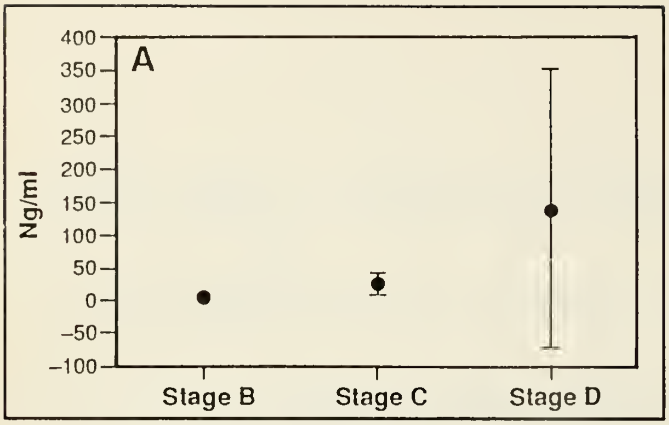

Figure 1A. Preoperative PSA levels correlated with clinical stage (bracket = range; dot = mean).

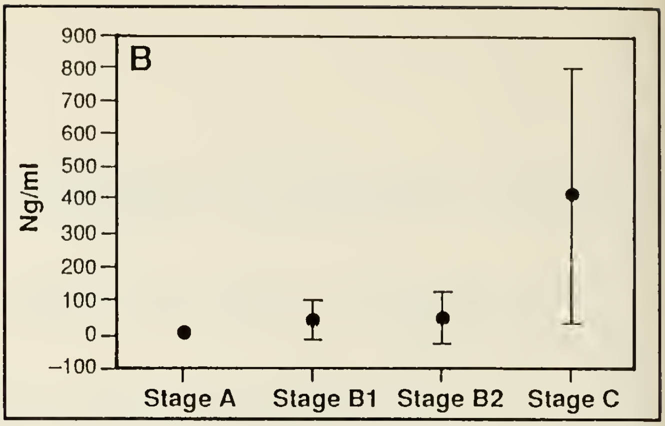

Figure 1B. Preoperative PSA levels correlated with pathological stage. (bracket = range; dot = mean).

Therefore, we prefer to obtain measurements prior to any manipulation or procedure of the prostate gland. In this article we review the role of PSA in screening, staging and monitoring response to treatment in patients with carcinoma of the prostate.

Screening

According to the literature, 41% to 98% of patients with proven carcinoma of the prostate will have an elevated serum PSA level,[7-12] depending on the stage of the disease. However, 20% to 86% of men with BPH will also show PSA level elevations.[8-10] Recent studies suggest that levels of PSA over 10 ng/dL, as measured by the monoclonal assay, are uncommon in men with BPH. Myrtle, Ercole and Hudson[6,7,10] have all independently reported that only 2% to 3% of individuals with proven BPH will have PSA levels over 10 ng/dL.[8-12] Men with cancer are also more likely to have antigen levels over 10 ng/dL, as reported by Hudson[10] and Cooner.[13] Their studies showed 41% and 55%, respectively, of patients with carcinoma had PSA levels over 10 ng/dL. However, in a more recent article,[11] 4.2% of patients with totally normal antigen levels were found to have cancer, and the ability of PSA to predict malignancy was almost identical to that of the DRE (35% for the former and 35.9% for the latter) in 1,807 patients studied.

In a newly released study, 1,653 men were screened with sequential serum PSA levels. Of 112 patients who underwent transrectal ultrasound (TRUS) and prostate biopsy because of PSA levels over 4 ng/dL, (37) 33% were found to have carcinoma of the prostate. The conclusions drawn were that the combined use of the serum PSA, DRE and TRUS was superior than DRE alone in the early detection of prostate cancer.[18]

Presently, we must say that even though PSA levels over 4 ng/dL are a cause for concern, requiring further urologic investigation, there is not enough proof in the literature to recommend PSA measurement alone as a mass screening marker for prostate cancer.

PSA in Staging Patients with Proven Prostate Cancer

Several investigators have shown that PSA levels tend to correlate with the amount of tumor and its clinical stage.[8,9,12,14,15] However, the researchers have used different upper limits of normal, and in all studies, there has been significant variability in tumor volume at any given PSA level. One must also take into account that carcinoma of the prostate almost invariably co-exists with BPH. At present, we cannot determine by an assay what ratio of antigen comes from malignant or benign tissue. These points are well demonstrated in a report by Lange,[16] in which the positive predictive value of a PSA over 10 ng/dL in finding extraprostatic tumor extension was 78%, and the ability of a PSA level of 10 ng/dL to predict confinement of this disease (negative predictive value) was only 61%. Our data on 31 patients with histologically verified cancer show that 6.5% of these cancer patients had PSA levels from 3 to 4 ng/mL, 16.1% has PSA levels between 5 and 10 ng/mL, and 77.4% had PSA levels over 10 ng/mL. This is a false negative rate of 6.5% or 22.6%, depending on which cutoff was used. When we grouped PSA levels according to clinical stage, our mean values were 11.4, 44.8, 64.3 and 417.0 ng for stages A, B1, B2 and C, respectively. When we regrouped the levels according to histological stage, mean values were 5.3, 22.7 and 154.2 ng for stages B, C and D, respectively. Although mean PSA levels tended to increase with higher clinical stages for prostate cancer, differences were not statistically different, and there was substantial overlap regardless of the method of staging (Fig 1). Therefore, even though very high levels (over 50 ng/dL) are most likely indicative of advanced disease, PSA lacks the diagnostic accuracy to determine which patients have localized and which have extra-prostatic disease.

PSA in Monitoring Treatment Response

The most useful role of PSA measurement is in the detection of residual tumor, possible recurrence or disease progression following treatment. In theory, following radical prostatectomy, serum PSA levels should return to undetectable levels within the time period of the serum half-life, usually in the range of 10 to 20 days; however, it is best to wait up to 60 days after surgery before repeating the assay. Lange and Stamey,[16,17] have demonstrated these findings on their series of patients, as have Hudson,[10] who showed that in 87 to 98 (89%) patients with pathologically localized carcinoma, serum PSA levels were undetectable after radical surgery. However, a single determination does not suffice. The serial monitoring after treatment is necessary; up to 9% of men with initial non-detectable PSA levels after surgery are reported to later develop recurrent disease.[17] Most recurrences occur between six months to one year postoperatively; however, recurrences can occur even later.

Measurement of PSA levels is more sensitive in predicting tumor recurrences six months to a year before symptoms appear, or the bone scan is postitive. A bone scan is necessary only when antigen levels indicate disease progression. It appears that PSA levels drop after radiation. However, when serial determinations are performed for more than a year after treatment, approximately half of the patients show rising levels. When these patients undergo subsequent prostate biopsies, almost all of them have cancer in the specimens, indicating treatment failure.

Radiation therapy may disrupt the reading of PSA values, because even in the presence of normal or upper limits of normal levels, there may be a substantial tumor burden remaining with the possibility of metastasis, even when the PSA value is less than 10 ng/dL.[17] At the present time, PSA is the best way to monitor response to androgen deprivation treatment in patients with metastatic prostate cancer. Up to 95% of these patients show a decrease in antigen levels during the first year of treatment, and in those few men (10%) in whom PSA remains undetectable after six months of therapy, prolonged survival can be excepted.[17]

PSA may also prove to be useful in the planning of management in patients with stage A1 adenocarcinoma of the prostate (a well-differentiated focus of carcinoma found incidentally during prostatectomy for presumably benign hyperplasia). If no residual malignancy is demonstrated, these individuals can be managed by observation alone. Traditionally, such patients have been subjected to either a repeat transurethral resection or repeated prostatic biopsy with the purpose of detecting remnants of clinically significant cancer. Recently, Hudson and co-workers[10] reported on 15 patients with A1 disease observed expectantly for 15 to 120 months, in whom no PSA elevations or metastatic disease has occurred. Our early experience with six patients, observed for at least 18 months, has revealed no serologic evidence of recurrence. It seems reasonable to monitor patients with A1 cancer of the prostate with serum PSA determinations. If there is an upward fluctuation from baseline levels, transrectal ultrasound and repeat biopsies may be performed.

Conclusion

Prostatic specific antigen is the most important tumor marker available today to monitor treatment response in patients with prostate cancer. Its role as a screening tool remains to be determined.

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The Prevalence of Alcohol, Tobacco and Other Drugs Among Missouri 12th Graders

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The authors present the findings of a survey of Missouri high school seniors that assesses the use of tobacco, alcohol and 13 other illicit drugs.

Use of drugs by school age youth is a matter of deep concern. National polls identify drug use as our most serious national problem, with the involvement of children as its most disturbing aspect.[1] Shocking news images of youngsters killing one another in drug wars fuel the demand for intervention by the armed forces, harsher legal controls, and drug testing at work and in school. The failure of large amounts of money to dam the apparent flood of drugs into our communities encourages arguments for the legalization of drugs.[2] By a factor of 2:1, abuse of drugs is perceived to be a more serious problem than alcohol abuse.[1]

Missouri has not been drug free. Local organizations such as the Ad Hoc Group Against Crime[3] have taken action to control the spread of drugs and gang violence in Kansas City. National statistics show Missouri to be consistently among the top 10 states in amphetamine sales.[4] In 1988, a total of 1,212,737 cultivated marijuana plants were eradicated in Missouri, 36 times the number in any other region VII state (Iowa, Kansas, South Dakota, Nebraska).[5]

Given that the most extreme aspects of the drug problem are the ones highlighted in the media, it is natural for some of us to believe that our communities are about to collapse. One antidote to these fears is to focus on less sensational but more representative depictions of the drug problem. Until recently, only drug use estimates from national samples were available to suggest the extent of drug use in Missouri. However, with the completion of statewide surveys of middle and high school students in 1988[6] and 1989, a picture of drug use specific to Missouri is emerging. To help fill in this picture, the results of the 1989 survey are presented here.

As described by Brownson et al,[7] the first statewide survey of drug use in Missouri was a joint effort of staff of the MO Says No to Alcohol and Drug Abuse initiative and a team funded by the National Institute of Cancer to study tobacco use. Although a wealth of information on drug use was developed from this study, not all questions of relevance to the MO Says No program could be answered in a single survey. Therefore, the Missouri Department of Health staff worked with the departments of Mental Health and Elementary and Secondary Education to conduct a follow-up survey in the spring of 1989. The goal of this survey was to assess the prevalence of 15

Table 1

Lifetime Use: Percent Trying a Substance and (95% Confidence Interval) by Sex, Race and Area

Substance	State Total		Sex				Race				Area			
			Male		Female		White		Nonwhite		Urban		Rural	
	%	±CI	%	±CI	%	±CI	%	±CI	%	±CI	%	±CI	%	±CI
Alcohol	94	(1)	94	(2)	94	(2)	94	(1)	91	(2)*	94	(1)	93	(2)
Cigarettes	71	(2)	71	(3)	72	(3)	72	(2)	68	(6)*	72	(3)	70	(4)
Marijuana	47	(3)	48	(4)	46	(4)*	46	(4)	52	(5)	51	(4)	40	(5)*
Caffeine	46	(4)	46	(4)	45	(5)	51	(3)	17	(6)	46	(6)	45	(4)
Smokeless Tobacco	44	(4)	68	(4)	19	(3)*	48	(3)	23	(6)*	39	(5)	51	(4)*
Amphetamines	26	(3)	27	(4)	24	(4)	29	(3)	11	(4)*	26	(4)	26	(4)
Inhalants	22	(3)	27	(3)	16	(3)*	23	(3)	16	(7)*	21	(4)	22	(4)*
Tranquilizers	11	(2)	10	(2)	11	(2)*	11	(2)	6	(3)*	10	(2)	11	(2)*
Other Narcotics[c]	10	(2)	12	(3)	9	(2)	12	(2)	5	(3)*	11	(3)	10	(2)*
Cocaine	10	(2)	11	(2)	8	(2)*	10	(2)	7	(3)*	10	(2)	8	(2)*
Barbiturates	8	(1)	9	(2)	7	(2)	9	(1)	3	(2)*	7	(2)	10	(2)
LSD or PCP	8	(2)	10	(2)	6	(2)*	8	(2)	4	(2)*	8	(2)	7	(2)*
Quaaludes	4	(1)	5	(1)	3	(1)	4	(1)	2	(1)	4	(1)	5	(2)
Steroids	2	(1)	4	(2)	1	(b)	3	(1)	2	(1)	1	(1)	4	(2)
Heroin	2	(1)	2	(1)	1	(1)*	2	(1)	a	*	1	(1)	3	(1)
Sample n	2902		1408		1494		2514		388		1439		1463	

* Differences between subgroups are in the same direction as in the 1988 Missouri survey.
a Estimate is 1% or less and too unreliable to report, as indicated by a standard error that is at least half as large as the estimate.
b Percent was zero after rounding.
c Narcotics not including heroin.

drugs, and to obtain information on attitude and knowledge variables related to drug use. Seventh graders were surveyed to supplement the data collected on 5th and 8th graders during the 1988 survey. Twelfth graders were surveyed again so that prevalence estimates could be compared to the 1988 Missouri results and to estimates of drug use among 12th graders nationwide. Here we present the results of the 12th grade survey.

Methods

The questionnaire was developed with assistance from the departments of Elementary and Secondary Education and Mental Health. To allow comparison with national drug use rates, the questionnaire was patterned on forms of the annual High School Senior Survey[8] sponsored by the National Institute on Drug Abuse (NIDA). The 100 items comprising the questionnaire asked about the use of 15 different drugs, as well as about attitudes and knowledge related to drug use.

Following the format of the NIDA survey, we asked about the frequency of drug use according to three measures. These were the lifetime rate, or the proportion of individuals who have used a drug at least once in their lives; the annual rate, or the proportion who have used a drug one or more times in the last 12 months prior to the survey; and the 30-day rate, or the proportion who have used a drug one or more times in the 30 days prior to the survey. (The latter is an estimate of the rate of current drug use, although it will include a few students who use drugs only infrequently.) The annual rates were consistent with the lifetime and 30-day rates, so they have been omitted to simplify the presentation.

To select students for the study, a computer file of 1987-1988 public school enrollment was stratified into urban and rural schools according to

Table 2

30-day Use: Percent Using a Substance and (95% Confidence Interval) by Sex, Race and Area

Substance	State Total		Sex				Race				Area			
			Male		Female		White		Nonwhite		Urban		Rural	
	%	±CI	%	±CI	%	±CI	%	±CI	%	±CI	%	±CI	%	±CI
Alcohol	62	(3)	66	(3)	58	(4)*	65	(3)	47	(6)*	62	(4)	62	(4)*
Cigarettes	29	(3)	28	(3)	30	(3)*	32	(3)	16	(3)*	28	(3)	31	(4)*
Marijuana	18	(2)	21	(3)	15	(3)*	18	(3)	17	(3)*	20	(3)	15	(3)*
Caffeine	12	(2)	14	(2)	10	(2)	14	(2)	5	(3)	12	(2)	14	(2)
Smokeless Tobacco	12	(2)	23	(4)	1	(1)*	14	(2)	4	(2)	11	(3)	15	(3)*
Amphetamines	7	(1)	8	(2)	5	(1)	8	(1)	3	(2)*	7	(2)	6	(2)*
Inhalants	4	(1)	5	(1)	2	(1)*	3	(1)	4	(3)	3	(1)	4	(1)
Tranquilizers	2	(1)	2	(1)	2	(1)	2	(1)	1	(1)*	2	(1)	2	(1)*
Other Narcotics[c]	2	(1)	3	(1)	2	(1)	3	(1)	2	(1)*	3	(1)	2	(1)*
Cocaine	3	(1)	3	(1)	2	(1)*	3	(1)	1	(1)*	3	(1)	2	(1)*
Barbiturates	2	(1)	2	(1)	1	(b)*	2	(1)	a	*	1	(1)	2	(1)
LSD or PCP	1	(1)	2	(1)	1	(1)*	2	(1)	a	*	1	(1)	1	(1)
Quaaludes	1	(1)	2	(1)	b	(b)	1	(1)	a		1	(1)	1	(1)
Steroids	1	(b)	2	(b)	b	(b)	1	(1)	1	(1)	b	(b)	2	(1)
Heroin	b	(b)	1	(b)	a	*	a		a		b		a	
Sample n	2902		1408		1494		2514		388		1439		1463	

* Differences between subgroups are in the same direction as in 1988 Missouri survey.
a Estimate is 1% or less and too unreliable to report, as indicated by a standard error that is at least half as large as the estimate.
b Percent was zero after rounding.
c Narcotics not including heroin.

their location in Metropolitan Statistical Area (MSA) or non-MSA counties.[9] From this file, we selected 28 urban and 33 rural schools systematically and in proportion to their enrollments. This tended to draw larger schools into the sample, minimizing the resources needed to achieve a sample of approximately 3000 seniors. Rural schools were oversampled so that equally precise drug use estimates for urban and rural students would be obtained. Only one school declined to participate, resulting in a final sample of 60 high schools.

Surveying was conducted between February 1, 1989 and April 30, 1989, on dates chosen by the schools. Random selection of students within schools was not feasible, so principals were asked to select two or three representative (preferably mandatory) classes so that about 60 students per school would be surveyed; in small schools all students were surveyed. Teachers of the selected classes administered the questionnaire during a single class period. Standardized instructions emphasized to the students that the survey was voluntary, that the questionnaire should not be signed, and that no school staff would have access to the responses. Teachers were instructed to collect the questionnaires only after students had replaced them in cover envelopes.

In order to develop a single set of analysis weights for the questionnaire responses, all demographic and drug use items with either missing or conflicting values were corrected. This was done by a computerized imputation procedure that replaced missing and conflicting values with values from similar, error-free records. Less than 3% of the responses required correction in this manner. Comparison of the corrected data with the uncorrected data indicated that the imputation procedure did not substantially change the prevalence of any of the drugs.

Validation of the survey was accomplished by comparing the prevalence estimates to estimates from the 1988 Missouri survey and to national estimates (Missouri and the United States are frequently similar on measures of health). The 1988 and 1989 Missouri surveys were also compared to one another with respect to correlations among variables, under the assumption that invalid responses would prevent parallel results in the two surveys. All comparisons strongly supported an assumption of validity.

To analyze the data, responses were weighted to adjust for the probability of being selected into the sample and for students who were absent or did not respond. These weights were then inflated to sum to the fall enrollment figures for each sex and stratum. The weighted responses were analyzed with SESUDAAN,[10] a commercial survey analysis program that produces prevalence estimates and standard errors adjusted for the sampling method.

In comparing subgroups on three demographic variables (sex, race, and urban-rural location) on each of two prevalence measures of 15 drugs, 90 comparisons are made; if the .05 level of significance were used, at least four comparisons could be statistically significant by chance alone; therefore, subgroup differences were also compared to corresponding results of the 1988 Missouri survey. Parallel results from the two surveys should reflect reliable differences in population subgroups and not sampling variation.

Results and Discussion

The final sample consisted of 2,902 high school seniors, a response rate of 90% of the enrolled students. Males made up 48.5% of the sample, close to the enrollment proportion of 50.2%. Ages ranged from 16 to 21 with an average of 17.6. White students made up 87% of the sample, black students 11%, and other ethnic groups 2%. These proportions are close to estimates for the population of Missouri's 15-19-year-olds in 1988 - 85%, 12%, and 3%, respectively.[11]

Prevalence Estimates. Like their adult role models, adolescents use alcohol more frequently than any other drug. Nearly all the seniors, an estimated 94%, had tried alcohol at some time in their lives (Table 1). Almost two-thirds, 62%, were currently using alcohol (Table 2). More than a third, 41% (± 3%), reported having five or more drinks in a row at least once during the two weeks prior to the survey.

Although the prevalence of problem drinkers in the general population has been estimated to be less than 10%,[12] the association of alcohol with a myriad of health and social problems has made it the most costly of the abused substances. A 1983 study calculated that the effects of alcohol abuse cost society $117 billion — almost twice the $60 billion estimated for the use of illegal drugs.[13]

The second most popular drug among the seniors was tobacco. Seventy percent of both males and females had tried cigarettes, and nearly 70% of the males had tried smokeless tobacco. Current use was about half that of alcohol: almost a third of both males and females were smoking cigarettes, and nearly a fourth of the males were using smokeless tobacco.

The morbidity and mortality associated with using tobacco, and the role of physicians in discouraging its use, has been discussed in recent editions of *Missouri Medicine*.[7,14] It is worth pointing out, however, that all other drugs combined do not account for as many deaths as tobacco.[15]

The perception that marijuana is a harmless drug that can induce feelings of well-being has helped to make it one of the most widely used illegal drugs. Almost one in two seniors in our sample said they had tried marijuana, and nearly one in five said they had used it recently (in the last 30 days).

Although the health effects of marijuana use are still being debated (see Okie,[16] for example), a growing body of evidence suggests that marijuana is not harmless. Recent studies add marijuana to the list of substances — tobacco, alcohol, cocaine, etc. — that are associated with negative birth outcomes.[17] Chronic heavy use of marijuana is likely to increase the risk for lung cancer.[18] And although casual use of marijuana is thought to be relatively safe, the temporary degradation in mental acuity that occurs can be a contributing factor to motor vehicle crashes and other causes of injury.

The caffeine drugs (No-DoZ, Vivarin, Wake, etc.) were only slightly less popular than marijuana. Forty-six percent of the seniors said they had tried these drugs, and 12% said they had used them in the last 30 days. Further examination of our data indicated that about 1% of the seniors had used a caffeinated drug 20 or more times in the month prior to the survey. Such heavy use, daily or more on average, reflects dangerous abuse rather than occasional pick-me-ups for studying. The health risks of heavy use of caffeine products are far from benign and range from anxiety, tinnitus, and muscle tremor to hyperglycemia, tachycardia and death.[19]

Unlike most of the other drugs tracked through the NIDA surveys, the inhalants have not

Table 3

Comparison of Missouri and U.S.[a] Drug-Use Rates:
Lifetime and 30-Day Prevalence Measures

Substance	Lifetime Use		30-Day Use	
	Missouri %	U.S. %	Missouri %	U.S. %
Alcohol	93.5	90.7*	61.9	60.0
Cigarettes	71.3	65.7*	29.1	28.6
Marijuana	46.8	43.7	17.8	16.7
Amphetamines	25.8	19.1*	6.9	4.2*
Inhalants	21.6	17.6*	3.5	2.3*
Tranquilizers	10.5	7.6*	2.1	1.3*
Other Narcotics[b]	10.4	8.3*	2.4	1.6*
Barbiturates	8.1	6.5*	1.6	1.4
Quaaludes	4.0	2.7*	1.1	0.6*
Cocaine	9.6	10.3	2.7	2.8
LSD/PCP	7.7	9.9*	1.3	2.9*
Steroids	2.4	3.0	0.9	0.8
Heroin	1.9	1.3*	0.3	0.3
Illicit drug other than marijuana[c]	32.3	31.4	9.8	9.1
Any illicit drug[d]	52.0	50.9	21.1	19.7

* Proportions significantly different at .05 level using z test approximated by adjusting U.S. sample size by design effects published in 1984 report (see reference 36). Missouri could not be compared to the U.S. on the illicit-drug-other-than-marijuana or any-illicit-drug categories because design effects for the U.S. estimates were not available.

a. 1989 High School Senior Survey - See reference 20.

b. Narcotics not including heroin.

c. Excludes alcohol, tobacco, inhalants, caffeine drugs, steroids and marijuana.

d. Excludes alcohol, tobacco, inhalants, caffeine drugs, and steroids, but not marijuana.

decreased in use over the last few years.[20] These are among the easiest drugs for adolescents to obtain. They can be among the most dangerous as well. Although deaths associated with inhalant use are infrequent, they are not unknown. Plastic bags used to inhale fumes can cause suffocation if the user loses consciousness, and the chemicals in cleaning fluids and aerosol propellants have caused death from ventricular fibrillation.[21] Our study found that 22% of Missouri seniors had tried an inhalant, and that 4% had used one recently.

A number of prescription drugs are abused by adolescents. Among these are sedatives (tranquilizers, barbiturates, methaqualone), pain killers (codeine, morphine, demerol, talwin, etc.), and stimulants (amphetamines, methamphetamine). Johnson, O'Malley and Bachman[22] found that students who had used these drugs for the first time under medical supervision had higher rates of illicit use than students who had never used the drugs medically. They also noted that the decline in the illicit use of these drugs during the last 10 years has coincided with a decrease in their medical use. (The authors were careful to point out that the association between prescription rates and abuse rates may have been incidental to other factors.)

Nonmedical use of prescription drugs was infrequent in our sample. Barbiturates, narcotics other than heroin, and tranquilizers had lifetime rates of 8% to 11%, and 30-day rates of about 2%. Quaaludes were used primarily by males: 5% of senior males had tried them, and 2% had used them in the past 30 days.

In recent years, the news media have highlighted the abuse of anabolic steroids by weight lifters and other athletes. Ben Johnson's use of steroids prior to the 1988 Olympic games underscores the stength of the athlete's belief in the potency of these drugs. Given the association of steroids with liver problems, psychological reactions, and infertility,[23] it is a belief that should be vigorously attacked.

Use of steroids is not widespread among high school seniors in Missouri. Four percent of the males said they had tried steroids, and 2% said they had used them recently. According to a national survey,[24] about two-thirds of steroid users are likely to be involved in school sports, with football players and wrestlers accounting for more than half of this group.

PCP, originally used as an anesthetic, and LSD, synthesized from grain fungi, can produce euphoria and intense visions and hallucinations. They can also produce feelings of panic, paranoia, and helplessness. Psychotic reactions, sometimes prolonged, have occasionally resulted in suicidal or homicidal behaviors.[21] Although the rates of PCP and LSD use are low nationwide, they have been rising since 1988.[20] According to our study, 8% of the seniors had tried PCP or LSD, and 1% had used them in the past 30 days.

Cocaine, a central nervous system stimulant, has few rivals when it comes to public concern over a drug. Its increasing notoriety has coincided with the increasing prevalence in the 1980s of crack, the smokeable form of cocaine. Crack's characteristics — inexpensive, quick-acting, extremely potent and brief in its effects — have made it a lucrative commodity worth killing for by urban gangs of adolescents and young adults.[25] Depending on the dose and duration of use, the health effects of cocaine can include irritability, sleeplessness, anxiety, and paranoia. Recent studies implicate prenatal cocaine use in instances of prematurity, low birth weight, and fetal death.[26]

If Missouri follows national trends, at least the casual use of cocaine is declining. In the last three years, the lifetime rate of crack cocaine among U.S. seniors has dropped from 5.4% to 4.7%, while the lifetime rate of other forms of cocaine has dropped from 14.0% to 8.5%.[20] In

Missouri, an estimated 10% of the seniors had tried cocaine, and 3% were currently using it.

Heroin is commonly believed to be an extremely addictive and dangerous drug used mainly by society's outcasts. According to one source, however, heroin ranks below cigarettes, cocaine, valium, seconal and alcohol in addictiveness;[27] Studies of heroin use during the 1960s and 1970s also found less persistence in the use of heroin than in the use of alcohol, tobacco, marijuana, cocaine, stimulants and sedatives.[28] Moreover, the morbity and mortality related to heroin use have been attributed to overdoses and the effects of using unsterile needles rather than to the drug itself.[21] On the other hand, infants of heroin users may experience high rates of negative birth outcomes.[29,30]

Heroin is one of the least prevalent drugs. Because of its reputation it is also one of the most underreported.[31] In our study, 2% of the seniors said they had tried heroin, and less than 1% said they had used it recently.

Demographic Comparisons. Sex. Lifetime rates of drug use were higher among males than females. Differences were frequently slight, though, and about the same proportion of males and females had tried the most popular drugs, namely alcohol, cigarettes, marijuana, caffeine drugs, amphetamines and tranquilizers. Males were much more likely than females to have tried smokeless tobacco, inhalants, and steroids.

Males were also more likely than females to be current users of drugs. Again, many differences were small. Among the most prevalent drugs, differences were largest for marijuana, caffeinated drugs and smokeless tobacco. The substantial difference between the sexes in 30-day amphetamine use (males 8%, females 5%) was not confirmed by the 1988 survey (males 6%, females 7%).

Race. Tables 1 and 2 point to striking differences in drug use between white and nonwhite students, with white students being more likely than nonwhite (mainly black) students to use almost every drug. Though differences were occasionally too small to reach statistical significance, they were consistent among the measures of use (lifetime, annual and 30-day) and between the two Missouri surveys.

As reflected in the lifetime measures of drug use, three times as many white as nonwhite seniors had tried caffeine drugs, amphetamines, and barbiturates; about two times as many had tried smokeless tobacco, tranquilizers, LSD/PCP, quaaludes, and narcotics other than heroin. According to the 30-day measures, about three times as many white as nonwhite seniors were using cigarettes, caffeine drugs, smokeless tobacco, amphetamines, tranquilizers, and cocaine. White and nonwhite students reported similar rates of use for marijuana, inhalants, and steroids.

Ours is not the first study to find less drug use among minority youth.[32-35] Some evidence suggests that blacks underreport drug use, possibly out of distrust of research situations.[33] This may not be the only explanation, however. One study of the drinking patterns of high school seniors found that blacks began drinking at a later age than whites, and did their drinking at family gatherings rather than at unsupervised parties, factors associated with lower alcohol use.[32]

In contrast to adolescents, older blacks have reported relatively high alcohol use,[12] a finding attributed to low employment and income.[12,32] Blacks who have dropped out are also likely to have higher substance use rates than blacks who are still in school. These patterns would help to account for the high rates of liver cirrhosis and other alcohol-related problems[12] in a population that exhibits low rates of alcohol use in adolescence.

Area. Students in the urban and rural areas reported similar levels of drug use. Some differences are apparent, though. The lifetime and 30-day rates are consistent in indicating slightly greater use of marijuana by urban students, and greater use of barbiturates and steroids by rural students ($p<.05$ for all comparisons).

The lifetime rates of both smokeless tobacco and heroin are also significantly higher for rural students, although the 30-day rates for these drugs are not. The 1988 Missouri survey found that rural students were more likely than urban students to use smokeless tobacco, but not barbiturates or heroin. This suggests that smokeless tobacco, and possibly steroids, are more prevalent among rural students, but that area differences in heroin and barbiturate use are due to sampling variation.

Comparisons with the United States. The figures in Table 3 appear to reflect a contradiction. The last row indicates that Missouri and the United States[20] experienced similar rates of illicit drug use — about one in every two seniors in both Missouri and the United States had tried at least one illicit drug, and about one in every five were currently using at least one drug. Yet for the top nine drugs listed, both the lifetime and the 30-day rates are higher for Missouri than for the United States (although not all differences are statistically significant).

The resolution of this paradox is that some drugs were more prevalent among the drug users in Missouri than among drug users in the rest of the United States. As Table 3 indicates, use of amphetamines, inhalants, tranquilizers, narcotics other than heroin, and quaaludes was more prevalent in Missouri.

The differences between Missouri and the United States for the above drugs are statistically significant ($p<.05$, 30-day rates), and they are supported by the findings of the 1988 survey. This suggests these drugs are in fact more prevalent in Missouri. On the other hand, the prevalence of these drugs are low and the differences between Missouri and the United States are generally small. Furthermore, the proportions of seniors using any illicit drug are similar (21.0% vs. 19.7%). Taken all together, these results do not depict an illicit drug problem that is substantially more serious in Missouri than in the rest of the United States.

The prevalence of alcohol is similar in Missouri and the United States according to both the lifetime and the 30-day rates. By one indicator, though, alcohol abuse may be more frequent among Missouri 12th graders: the proportion of students having five or more drinks in a row one or more times in the two weeks prior to the survey was 41% in our sample compared to 33% among U.S. seniors (not shown).[20]

Conclusion

Media images of adolescents shooting one another in turf disputes represents the most extreme form of the drug problem. Though these incidents are a tragedy for the individuals and communities involved, they do not typify students in Missouri or the rest of the United States. Our survey indicates that about 10% of Missouri seniors were using an illicit drug other than marijuana, and that about 3% were using cocaine. In contrast, 29% were smoking cigarettes and 62% were using alcohol. (Although the most serious drug abusers are likely to be dropouts and not represented in surveys, it has been estimated that including them would increase rates for the illicit drugs only a few percentage points.[37])

Most disturbing is the finding of high rates of alcohol abuse among Missouri seniors. If corroborated in future studies, it would indicate many adolescents are putting themselves at risk for alcohol-related health problems, and at the same time possibly putting others at risk for victimization by drunk drivers. While we are right to be concerned about the use of illicit drugs, we should not overlook the more widespread damage inflicted by the use of alcohol and tobacco.

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■ **James W. Daly, M.D.,** professor and chairman of obstetrics and gynecology, was one of 16 individuals appointed to a new advisory panel of experts by the U.S. Pharmacopeial Convention Inc., to work in its drug development programs.

The Advisory Panel on Obstetrics and Gynecology is one of 33 expert panels that contribute to the USP DI date base. During its 1990-1995 term, the panel will help determine content of the data base and provide input relating to the clinical aspect of USP's work in the area of drug standards and information. The USP sets the legally enforceable standards for drugs in the United States.

■ **Herbert S. Goldberg, Ph.D.,** associate dean for research and academic affairs, has been appointed to the Technical Literature Review Committee of the National Library of Medicine.

In response to a request from U.S. Sen. Dennis DeConcini, Goldberg testified recently at a hearing on legislation to authorize appropriations for the Patent and Trademark Office. The hearing was held by the Senate Committee on the Judiciary's Subcommittee on Patents, Copyrights and Trademarks, of which DeConcini is chairman.

■ **Laura S. Hillman, M.D.,** professor of child health, has been awarded a three-year grant for $176,303 by the Dairy Council. She and her colleagues are trying to determine if women absorb different amounts of calcium during the course of pregnancy and lactation.

■ **Robert Lim, Ph.D.,** associate professor of pharmacology, has been awarded a three-year, $126,000 grant by the Muscular Dystrophy Association. His work will focus on understanding what controls growth and differentiation in muscle cells and how certain cells can be stimulated to grow when muscle tissue is injured or attacked by a degenerative disease such as muscular dystrophy.

■ **Sara E. Walker, M.D.,** professor of medicine in the division of immunology and rheumatology, assumed office as governor of the Missouri Chapter of the American College of Physicians during the college's 72nd annual session in New Orleans. She also is chief of the rheumatology section at Harry S. Truman Memorial Veterans Hospital in Columbia.

■ **Connie Henke Yarbro, R.N., B.S.N.,** clinical assistant professor of medicine, was elected to the board of trustees of the Association of Community Cancer Centers at the group's recent meeting in Washington, D.C.

ACCC is a national organization of 435 institutional members in 46 states and the District of Columbia and 316 individual members. The institutional members represent a group of community short-term, acute-care hospitals that treat more than 30% of all new cancer patients in the country.

■ **John W. Yarbro, M.D., Ph.D.,** professor of medicine and director of hematology and oncology, has been selected by the American College of Physicians to serve as its representative to the American Joint Committee on Cancer.

The committee is sponsored by the American Cancer Society, the National Cancer Institute and the American Colleges of Surgeons, Radiologists, Physicians and Pathologists. It is assigned the responsibility of determining the standards of cancer diagnosis and treatment used nationwide. The committee meets annually and is responsible for preparing the *Manual for the Staging of Cancer,* which is published by J.B. Lipincott & Co.

■ **Karl Weber, M.D.,** delivered a presentation on "Interstitial Heart Disease and Mineralocorticoid Hormones" to Cardiology Grand Rounds at the Mayo Clinic in Rochester, Minnesota on March 29, 1991.

■ **Jack Curtis, M.D.,** professor and chief of Cardiothoracic Surgery, delivered a presentation on the "Early and Intermediate Follow-up of Patients Salvaged from Cardiopulmonary Bypass with Centrifugal Cardiac Assist" to the International College of Surgeons in Williamsburg, Virginia on March 22, 1991.

Washington University

■ The Harry Edison Foundation has donated $150,000 to the Medical Scientist Training Program (MSTP) at Washington University School of Medicine in St. Louis.

Washington University Chancellor **William H. Danforth** announced the gift, which will be used to establish a scholarship in the name of **I. Jerome Flance, M.D.,** clinical professor of internal medicine at the School of Medicine.

The Flance Scholarship will support a student throughout his or her MSTP training at the School of Medicine. Students in the program receive M.D. and Ph.D. degrees after completion of the six years of study.

Directed by **Carl Frieden, Ph.D.,** professor of biochemistry and molecular biophysics, the Washington University MSTP began in 1968 and is the largest MSTP in the United States. The program offers outstanding medical students an opportunity to train as academic physicians with a background in basic research.

■ Two faculty members at Washington University School of Medicine in St. Louis have been named Alumni Endowed Professors.

Douglas E. Berg, Ph.D., is alumni professor in molecular microbiology and **Robert D. Schreiber, Ph.D.**, is alumni professor in pathology. The appointments were announced by **William A. Peck, M.D.**, vice chancellor for medical affairs at Washington University and dean of the School of Medicine.

Supported with donations from alumni and former house staff, alumni professorships are designed to attract and retain faculty. The first professorship was established in 1982. The School of Medicine hopes to establish an alumni endowed professorship in each of its 17 departments; the Department of Pathology has the fourth.

Berg, professor of molecular microbiology and genetics, conducts research closely related to the nation's Human Genome Initiative. Washington University was one of four institutions in the nation designated last year as a Human Genome Center; the federally funded project's goal is to decipher the complete genetic message of human beings at the molecular level. Berg is studying transposable elements, the structure and evolution of genes and genomes, and the mechanisms by which bacterial organisms cause disease.

Schreiber is professor of pathology and molecular microbiology. Work in his laboratory focuses on understanding an important protein that regulates immune responses known as Interferon-gamma. One of Schreiber's goals is to determine how Interferon-gamma interacts with immunologically important cells by learning more about the role of the Interferon-gamma receptor which must be present for binding and cellular response to occur.

Other School of Medicine faculty who have been named alumni endowed professors are **Jeffrey I. Gordon, M.D.**, chairman of the department of molecular biology and pharmacology, and **Alan L. Schwartz, M.D., Ph.D.**, professor of molecular biology and pharmacology and director of the division of hematology/oncology. The first alumni endowed professor was **Philip Needleman, Ph.D.**, research professor and former chairman of the department of pharmacology, now vice president of corporate research at Monsanto.

■ Researchers at Washington University School of Medicine and St. Louis University School of Medicine are collaborating in a nationwide study to reduce the incidence of asthma and asthma-related deaths among minority children in the inner city.

The St. Louis medical schools will work cooperatively with researchers at seven other institutions around the country in the National Cooperative Inner-City Asthma Study, funded by the National Institute of Allergy and Infectious Diseases (NIAID). The NIAID will provide $2.5 million for the initial year of the five-year study, with $260,000 of that money going to the St. Louis study.

Principal investigators of the St. Louis project are **H. James Wedner, M.D.**, chief of clinical allergy and immunology at Washington University, and **Raymond G. Slavin, M.D.**, director of the division of allergy and immunology at St. Louis University. The two will meet with other researchers in April in Washington, D.C., to design a study protocol that will be followed by each institution. Investigators will examine factors in their respective communities that are related to asthma morbidity and mortality among black and Hispanic inner-city children ranging in age from four to 11.

Other Washington University investigators involved in the project are **Robert C. Strunk, M.D.**, professor of pediatrics, and **Edwin B. Fisher, Jr., Ph.D.**, director of the Center for Health Behavior Research. Other St. Louis University participants are **Gregory R. Evans, Ph.D.**, associate professor of public health in the Center for Health Services Education and Research, **Al P. Knutsen, M.D.**, director of the division of pediatric allergy and immunology, and **Ana-Maria Murgueytio, M.D.**, research assistant.

■ **W. Thomas Thach, M.D.**, has been named director of the Irene Walter Johnson Institute of Rehabilitation (IWJ) at Washington University School of Medicine in St. Louis.

Thach has been acting director of IWJ since 1989. His appointment was announced by **William A. Peck, M.D.**, vice chancellor for medical affairs and dean of the School of Medicine.

Thach is professor of anatomy and neurobiology and of neurology and neurological surgery at the School of Medicine. His research focuses on the neural control of posture and movement. He is particularly interested in the mechanisms by which various parts of the central nervous system control the performances of different motor tasks, the specific disabilities caused when these parts are damaged, the patterns in recovery of function following damage, and the residual capacities that may be used in designing rational rehabilitation therapy.

He is known for his contributions on the physiology and pathophysiology of the cerebellum, the motor cortex and the basal ganglia.

Thach joined the School of Medicine faculty as an associate professor in the Department of Anatomy and Neurobiology in 1975 and became a full professor in 1980. Prior to that he served on the faculty at Yale University School of Medicine.

■ **H. Mitchell Perry, Jr., M.D.**, professor of medicine at Washington University School of Medicine in St. Louis, has been awarded the Edward D. Freis Award for excellence in basic, clinical or applied research in hypertension.

The award from the National

High Blood Pressure Education Program was presented April 9 at the National Conference on Cholesterol and High Blood Pressure Control in Washington, D.C. A stipend of $1,000 accompanied the award.

Perry is director of the hypertension division and clinic at the School of Medicine and is a staff physician at Barnes Hospital. He also serves as director of the hypertension program at the St. Louis Veterans Administration Hospital and as physician coordinator for the VA's national hypertension program. His research in recent years has focused on problems with high blood pressure encountered by elderly people and minorities.

The **Edward D. Freis** Award was named in honor of Dr. Freis who was the physician responsible for a landmark study published in 1970 that showed treating patients with drugs for moderate hypertension decreased morbidity and mortality.

■ **Stacy Cheryl Smith, M.D.**, a postdoctoral researcher at Washington University School of Medicine in St. Louis, has received a fellowship from the Howard Hughes Medical Institute. The awards are the first in a new international program of postdoctoral research fellowships for physicians.

Smith was among 33 physician/scientists nationwide to receive the award, which provides funds for training in research on basic biological processes and disease mechanisms. The three-year fellowships are awarded to physicians who have completed at least two years of postgraduate clinical training. They provide an annual stipend of $35,000 to $50,000, a research allowance of $15,000 and $12,000 institutional allowance.

Smith is a postdoctoral fellow in cardiology at Barnes Hospital, a part of the Washington University Medical Center. Working in the laboratory of **Paul M. Allen, Ph.D.**, associate professor of pathology, Smith is trying to better understand how the immune system causes progressive destruction of the heart in certain individuals with acute myocarditis. Specifically, she is studying immune effector mechanisms that link myocarditis with chronic cardiomyopathy.

■ **James R. Schreiber, M.D.**, has been named professor and head of the Department of Obstetrics and Gynecology at Washington University School of Medicine in St. Louis.

Schreiber's appointment, effective July 1, was announced by **William A. Peck, M.D.**, vice chancellor for medical affairs at Washington University and acting head of the department since Jan. 1, 1990.

James R. Schreiber,MD

Schreiber comes to Washington University from the University of Chicago, where he has been on faculty since 1982. In addition to his School of Medicine position, he will serve on the staffs of Barnes and Jewish Hospitals, part of Washington University Medical Center, and Regional Medical Center.

■ **Peter G. Smith, M.D., Ph.D.**, of the Center for Cranial Base Surgery - St. John's Mercy Medical Center, presented "Combined Approaches to the Cranial Base" at the second annual meeting of the North American Skull Base Society in Orlando, Florida. He was also elected President of the Society for 1993. Dr. Smith is also affiliated with Washington University.

■ **G. Robert Kletzker, M.D.**, of the Center for Cranial Base Surgery - St. John's Mercy Medical Center, presented "Surgical Options in Reconstituting Lateral Cranial Base Defects" at the second annual meeting of the North American Skull Base Society in Orlando, Florida. In addition, he and Dr. Smith received second place for their exhibit on "3D Anatomy of the Combined Middle Cranial - Infratemporal Fossa Approach to the Cranial Base."

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New Members

■ **Larry W. Bader, D.O.**, Columbia Spine Rehab Center, 3501 Berrywood Drive, Columbia 65201, has become a member of the Boone County Medical Society. Dr. Bader received his preliminary education at Culver Stockton College and obtained his osteopathic degree at the Kirksville College of Osteopathic Medicine in 1965. He completed his internship at the Carson City Osteopathic Hospital, Carson City, Iowa. Dr. Bader specializes in osteopathic manipulative medicine.

■ **Lyle L. Brown, M.D.**, 1834 Broadway, Cape Girardeau 63701, has become a member of the Cape Girardeau County Medical Society. Dr. Brown received his preliminary education at Kansas State College and obtained his medical degree at the University of Missouri-Columbia School of Medicine in 1974. He completed his residency at Charity Hospital, New Orleans, LA. Dr. Brown specializes in cardiothoracic and vascular surgery.

■ **Ernest E. Davis, M.D.**, 13045 Tesson Ferry Road, St. Louis 63128, has become a member of the Missouri State Medical Association. Dr. Davis obtained his medical degree at the University of Illinois Medical School in 1974. He completed his residency at Deaconess Family Practice, St. Louis, MO. Dr. Davis specializes in family practice.

■ **David K. Ebelke, M.D.**, Suite 600, 2750 Hospital Dr., North Kansas City 64116, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. Ebelke received his preliminary education at the USAF Academy and obtained his medical degree at the University of Miami School of Medicine in 1981. He completed his residency at Wilford Hall USAF Medical Center, Lackland AFB, TX. Dr. Ebelke specializes in orthopaedic surgery.

■ **Michael E. Hayek, M.D.**, 675 Old Ballas Rd., St. Louis 63141, has become a member of the St. Louis Metropolitan Medical Society. Dr. Hayek obtained his medical degree at the University of Missouri-Columbia School of Medicine in 1983. He completed his residency at Jewish Hospital, St. Louis, MO. Dr. Hayek specializes in general surgery.

■ **R. Gideon Morrison, M.D.**, 601 E. 14th St., Sedalia 65301, has become a member of the Pettis County Medical Society. Dr. Morrison received his preliminary education at the University of North Texas and obtained his medical degree at the University of Missouri-Columbia School of Medicine in 1983. He completed his residency at the University of Missouri Hospital and Clinics, Columbia, MO. Dr. Morrison specializes in pathology.

■ **William R. Graden, M.D.**, 901 S. National, Springfield 65804, has become a member of the Greene County Medical Society. Dr. Graden received his preliminary education at Brigham Young University and obtained his medical degree at the University of Washington School of Medicine in 1978. He completed his residency at the Good Samaritan Hospital, Phoenix, AZ. Dr. Graden specializes in family practice.

■ **Gregory K. Haake, M.D.**, 4907 S. Harvard Ct., Springfield 65804, has become a member of the Greene County Medical Society. Dr. Haake received his preliminary education at the University of Illinois and obtained his medical degree at the Southern Illinois University School of Medicine in 1983. He completed his residency at the University of Iowa College of Medicine, Iowa City, Iowa. Dr. Haake specializes in anatomic and clinical pathology.

■ **Richard J. Howard, M.D.**, 100 N.W. Mock Ave., Blue Springs 64014, has become a member of the Missouri State Medical Association. Dr. Howard received his preliminary education at the University of South Dakota and obtained his medical degree at the Medical College of Wisconsin in 1982. He completed his residency at the University of Texas Medical Branch, Galveston, TX. Dr. Howard specializes in plastic and reconstructive surgery.

■ **Randall G. Kesseler, D.O.**, 1000 E. Primrose, Suite 520, Springfield 65804, has become a member of the Greene County Medical Society. Dr. Kesseler received his preliminary education at the University of North Texas and obtained his osteopathic degree at the Texas College of Osteopathic Medicine in 1984. He completed his residency at the Tulsa Regional Medical Center, Tulsa, OK. Dr. Kesseler specializes in anesthesiology.

■ **Paul M. Olive, M.D.**, 1900 S. National, #1980, Springfield 65804, received his preliminary education at the University of Missouri-Columbia and obtained his medical degree at the Tulane University School of Medicine in 1984. He completed his residency at Charity Hospital, New Orleans, LA. Dr. Olive specializes in orthopedic surgery.

■ **Jay S. Pepose, M.D., Ph.D.**, 517 S. Euclid Ave., St. Louis 63110, has become a member of the Missouri State Medical Association. Dr. Pepose received his preliminary education at Brandeis University and obtained his medical degree at the UCLA School of Medicine in 1982. He completed his residency at the Wilmer Institute/Johns Hopkins University School of Medicine, Baltimore, MD. Dr. Pepose specializes in ophthalmology.

■ **Eric D. Phillips, M.D.**, Suite 103, 6650 Rockhill Rd., Kansas City 64132, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. Phillips received his preliminary education at the University of Pennsylvania and obtained his medical degree at the Jefferson Medical College of Thomas Jefferson University in 1984. He completed his residency at the University of Maryland Hospital, Baltimore, MD. Dr. Phillips specializes in orthopaedic surgery.

■ **Edward J. Skeins, Jr., M.D.**, 3231 S. National, Springfield 65809, has become a member of the Greene County Medical Society. Dr. Skeins received his preliminary education at Louisiana State University and obtained his medical degree at Louisiana State University Medical Center in 1973. He completed his residency at the Earl K. Long Memorial Hospital, New Orleans, LA. Dr. Skeins specializes in occupational medicine.

■ **Ralph O. Smith, M.D.**, 505 Hobbs Rd., Jefferson City 65109, has become a member of the Franklin-Warren-Gasconade County Medical Society. Dr. Smith received his preliminary education at the University of Chicago and obtained his medical degree at the University of Chicago School of Medicine in 1943. He completed his residency at Barnes Hospital, St. Louis, MO. Dr. Smith specializes in internal medicine.

■ **Kent L. Snowden, M.D.**, 621 S. New Ballas Rd., Tower A - Suite 560, St. Louis 63141, has become a member of the St. Louis Metropolitan Medical Society. Dr. Snowden obtained his medical degree at the St. Louis University School of Medicine in 1979. He completed his residency at St. John's Mercy Hospital, St. Louis, MO. Dr. Snowden specializes in obstetrics/gynecology.

■ **Harvey Solomon, M.D.**, 3635 Vista at Grand Blvd., P.O. Box 15250, St. Louis 63110, has become a member of the Missouri State Medical Association. Dr. Solomon received his preliminary education at Antioch College and obtained his medical degree at the Hadassah-Hebrew University Medical School, Jerusalem, Israel in 1981. He completed his residency at Baylor University Medical Center, Dallas, TX. Dr. Solomon specializes in surgery.

■ **Barbara B. Sterkel, M.D.**, 6420 Clayton Rd., St. Louis 63117, has become a member of the St. Louis Metropolitan Medical Society. Dr. Sterkel obtained her medical degree at the St. Louis University School of Medicine in 1975. She completed her residency at St. Mary's Health Center, St. Louis, MO. Dr. Sterkel specializes in internal medicine.

■ **Mark F. Stroble, M.D.**, 621 S. New Ballas Rd., Sunset Hills 63141, has become a member of the St. Louis Metropolitan Medical Society. Dr. Stroble obtained his medical degree at the University of Missouri-Columbia School of Medicine in 1985. He completed his residency at the University of Missouri Hospital and Clinics, Columbia, MO. Dr. Stroble specializes in otolaryngology/head and neck surgery.

■ **Robert F. Thompson, M.D.**, Suite 510, 10550 Quivira Rd., Overland Park, KS 66215, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. Thompson received his preliminary education at the University of Kansas and obtained his medical degree at Creighton University School of Medicine in 1977. He completed his residency at St. Luke's Hospital, Kansas City, MO. Dr. Thompson specializes in radiology.

■ **Bradley J. Tissier, M.D.**, 10449 St. Charles Rock Road, St. Ann 63074, has become a member of the St. Louis Metropolitan Medical Society. Dr. Tissier received his preliminary education at the University of San Francisco and obtained his medical degree at St. Louis University School of Medicine in 1974. He completed his residency at St. John's Mercy Medical Center, St. Louis, MO. Dr. Tissier specializes in obstetrics/gynecology.

■ **Garry S. Tobin, M.D.**, 114 N. Taylor Ave., Second Floor, St. Louis 63108, has become a member of the St. Louis Metropolitan Medical Society. Dr. Tobin obtained his medical degree at the Washington University School of Medicine in 1985. He completed his residency at Barnes Hospital, St. Louis, MO. Dr. Tobin specializes in internal medicine.

■ **W. Tad Wilson, M.D.**, 1515 W. Truman Rd., Independence 64050, has become a member of the Missouri State Medical Association. Dr. Wilson received his preliminary education at the University of Kansas and obtained his medical degree at the University of Kansas School of Medicine in 1985. He completed his residency at the University of Texas Southwestern, Dallas, TX. Dr. Wilson specializes in urology.

■ **George F. Wong, III, M.D.**, 1001 Primrose, Springfield 65807, has become a member of the Greene County Medical Society. Dr. Wong received his preliminary education and obtained his medical degree at the University of Missouri-Kansas City School of Medicine in 1983. He completed his residency at the University of Kansas, Kansas City, KS. Dr. Wong specializes in neurology.

■ **John M. Zanol, M.D.**, 1129 Danforth Circle, Columbia 65201, has become a member of the Boone County Medical Society. Dr. Zanol received his preliminary education at Gonzaga University and obtained his medical degree at the University of Washington School of Medicine in 1986. He completed his residency at the University of Missouri Hospital and Clinics, Columbia, MO. Dr. Zanol specializes in family practice.

In Memoriam

■ **Francis R. Burns, M.D.**, died March 18, 1991 at the age of 75. Dr. Burns, an obstetrician/gynecologist, practiced medicine in Hannibal for more than 34 years. He was one of the founders of the Hannibal Clinic and was a member of the clinic's medical staff for 10 years before returning to private practice in 1970. He retired in 1983. He obtained his medical degree at Washington University School of Medicine in 1940. Dr. Burns was a member of the Northeast Counties Medical Society.

■ **Max S. Franklin, M.D.**, died April 2, 1991 at the age of 83. Dr. Burns, an internist and cardiologist, practiced medicine in the St. Louis area for 46 years before retiring in 1979. He was associate professor emeritus of clinical medicine at St. Louis University Medical Center after teaching there for many years. He was a past president of the Missouri State Medical Association (1976-77) and the Missouri State Medical Foundation. He obtained his medical degree at St. Louis University School of Medicine in 1933. Dr. Franklin was a member of the St. Louis Metropolitan Medical Society.

■ **George H. Lawrence, M.D.**, died April 6, 1991 at the age of 72. Dr. Lawrence, a neurologist and psychiatrist, practiced medicine in St. Louis from 1951 to 1972 and was an assistant professor of clinical neurology at St. Louis University School of Medicine during that time. During the 1960s, he was the chief psychiatrist for the St. Louis Police Department. He obtained his medical degree at the Medical College of Wisconsin in 1943. Dr. Lawrence was a member of the St. Louis Metropolitan Medical Society.

■ **Cleitus A. Presnell, M.D.**, died March 21, 1991 at the age of 87. Dr. Presnell, an otolaryngologist, practiced medicine in St. Louis for many years. He obtained his medical degree at St. Louis University School of Medicine in 1927. Dr. Presnell was a member of the St. Louis Metropolitan Medical Society.

■ **T. Eugene Ruff, M.D.**, died March 25, 1991 at the age of 83. Dr. Ruff, a urologist, practiced medicine in Poplar Bluff for more than 40 years. A general practitioner for eight years, he delivered more than 1,200 babies. He obtained his medical degree at Washington University School of Medicine in 1938. Dr. Ruff was a member of the Butler-Wayne-Ripley-Carter County Medical Society.

■ **Danny A. Smith, M.D.**, died January 26, 1991 at the age of 31. Dr. Smith, an internist, practiced medicine in St. Ann. He obtained his medical degree at East Tennessee State University Quillen-Dishner College of Medicine in 1986. Dr. Smith was a member of the Missouri State Medical Association.

■ **Sidney E. Smith, M.D.**, died February 5, 1991 at the age of 76. Dr. Smith, a dermatologist, practiced medicine in St. Louis. He obtained his medical degree at Meharry Medical College in 1940. Dr. Smith was a member of the St. Louis Metropolitan Medical Society.

Physician's Recognition Awards

Thirty MSMA members qualified for the MSMA-AMA Physician's Recognition Award during March 1991. The award, presented by the Missouri State Medical Association and the American Medical Association, is given to those physicians who voluntarily complete 150 credit hours of continuing medical education within a three-year period. Sixty of the credit hours must be earned in Category 1 programs.

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Butler-Wayne-Ripley-Carter

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Callaway

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Peter J. Molberg, *Springfield*

Metro Med of Greater Kansas City

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Thomas T. Crouch, *Kansas City*
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Alicia D. Gonzalez, *St. Louis*
George T. Grossberg, *St. Louis*
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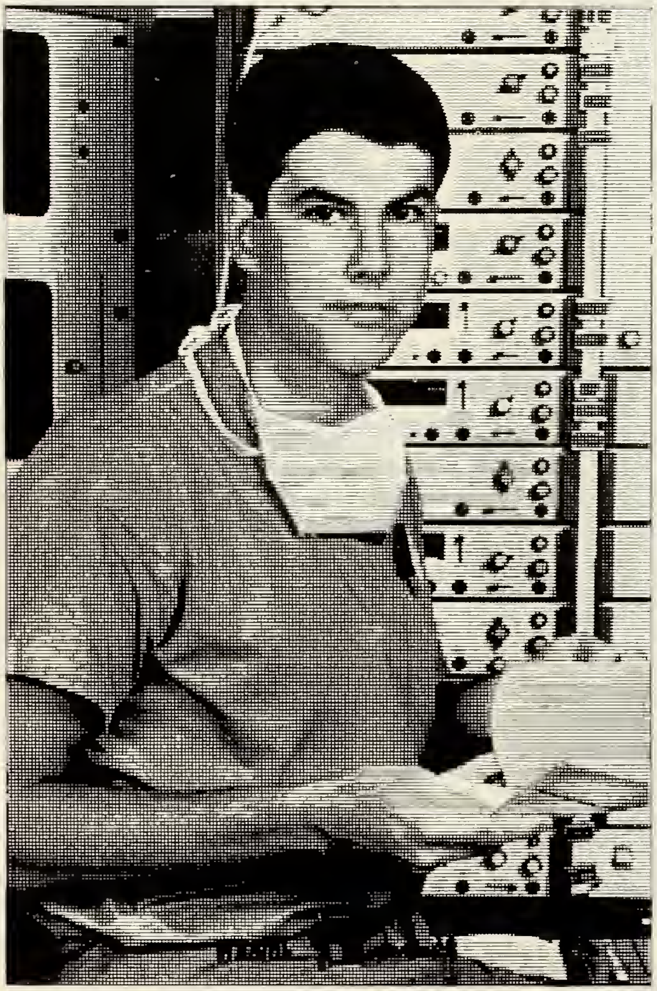

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Missouri Medicine

Journal of the Missouri State Medical Association

July 1991

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Missouri Medicine

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133rd Annual Convention

Missouri State Medical Association

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April 3-7, 1991

FIRST SESSION

The First Session of the MSMA House of Delegates was called to order at 10:00 a.m., Thursday, April 4, 1991 by Speaker of the House, Jo-Ellyn M. Ryall, M.D. The following officers and delegates were present during the 133rd Annual Meeting:

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Chariton-Macon-Monroe-Randolph	J.E. Campbell, *Macon*
Chariton-Macon-Monroe-Randolph	Charles Edwards, *Moberly*
Chariton-Macon-Monroe-Randolph	J.W. Fleming, *Moberly*
Northeast	Michael Bukstein, *Hannibal*
Northeast	Edward Plowman, *Hannibal*
Northeast	Lynn Walley, *Hannibal*

Third District

St. Louis	Arch M. Ahern, *St. Louis*
St. Louis	Luis B. Anglo, *St. Louis*
St. Louis	John T. Anstey, *St. Louis*
St. Louis	Vernon Balster, *St. Louis*
St. Louis	David L. Beato, *St. Louis*
St. Louis	George M. Bohigian, *St. Louis*
St. Louis	Robert V. Brennan, *St. Louis*
St. Louis	Harry O. Cole, *St. Louis*
St. Louis	R. Evan Crandall, *St. Louis*
St. Louis	James R. Criscione, Jr., *St. Louis*
St. Louis	Jack Croughan, *St. Louis*
St. Louis	Jonathan D. Dehner, *St. Louis*
St. Louis	Sylvester A. Flotte, *St. Louis*
St. Louis	Joseph Gagliardo, *St. Louis*
St. Louis	Gordon M. Goldman, *St. Louis*
St. Louis	E. Richard Graviss, *St. Louis*
St. Louis	George Hruza, *St. Louis*
St. Louis	Charles J. Johnson, *St. Louis*
St. Louis	Donald R. Judd, *St. Louis*
St. Louis	Robert S. Karsh, *St. Louis*
St. Louis	Jack Kayes, *St. Louis*
St. Louis	Alice D. Kitchen, *St. Louis*
St. Louis	Robert R. MacDonald, Jr., *St. Louis*
St. Louis	Otakar Machek, *St. Louis*
St. Louis	Bruce L. McClennan, *St. Louis*
St. Louis	Robert N. Miller, *St. Louis*
St. Louis	K. Lynne Moritz, *St. Louis*
St. Louis	Leopoldo P. Pardo, *St. Louis*
St. Louis	Meredith Payne, *St. Louis*
St. Louis	Lawrence Perlstein, *St. Louis*
St. Louis	David Perkins, *St. Louis*
St. Louis	Paul J. Petruska, *St. Louis*
St. Louis	Robert Ramsey, *St. Louis*
St. Louis	James C. Redington, *St. Louis*
St. Louis	John L. Rollo, *St. Louis*
St. Louis	M.L. Salmon, *St. Louis*
St. Louis	W.P. Schuessler, *St. Louis*
St. Louis	Melvin M. Schwartz, *St. Louis*
St. Louis	Stephen Slocum, *St. Louis*
St. Louis	John Stith, *St. Louis*
St. Louis	J. Regan Thomas, *St. Louis*
St. Louis	Bryan R. Troop, *St. Louis*
St. Louis	Leo L. Wacker, *St. Louis*
St. Louis	Joseph W. West, *St. Louis*
St. Louis	Newton B. White, *St. Louis*
St. Louis	Miles C. Whitener, *St. Louis*
St. Louis	James M. Whittico, *St. Louis*
St. Louis	David L. Yontz, *St. Louis*
St. Louis	J. Michael Zylka, *St. Louis*

Fourth District

Franklin-Gasconade-Warren	Ken Smith, *Washington*
St. Charles-Lincoln	Vic Clever, *St. Charles*
St. Charles-Lincoln	Jeffrey G. Copeland, *St. Charles*

Fifth District

Audrain	Nancy Bunge, *Mexico*
Audrain	Joe Corrado, *Mexico*
Boone	William Allen, *Columbia*
Boone	Diane Brukardt, *Columbia*
Boone	William Crowley, *Columbia*
Boone	Milamari Cunningham, *Columbia*
Boone	Emily Guyer, *Columbia*
Boone	Richard Heimburger, *Columbia*
Boone	Syed Arshad Husain, *Columbia*
Boone	Jerry D. Kennett, *Columbia*
Boone	Maarten Nieuwenhuizen, *Columbia*
Boone	Don Patterson, *Columbia*
Boone	Kenneth Rall, *Columbia*
Boone	James Roller, *Columbia*
Boone	William Michael See, *Columbia*
Boone	Jay Shah, *Columbia*
Boone	Hugh E. Stephenson, Jr., *Columbia*
Cole	Alan Braun, *Jefferson City*
Cole	C.S. Exon, *Jefferson City*
Cole	Rebecca Lueckenhoff, *Jefferson City*
Cole	Robert P. Wankum, *Jefferson City*
Lake of the Ozarks	Chris Fotopoulos, *Osage Beach*
Lake of the Ozarks	Roger Francis, *Osage Beach*
Lake of the Ozarks	M.R. Hayden, *Camdenton*

Sixth District

Lafayette-Ray	Jerry Meyer, *Concordia*
Lafayette-Ray	Charles Riley, *Richmond*
Pettis	Phillip M. Hornbostel, *Sedalia*
West Central	Grant Bever, *Harrisonville*
West Central	Gerald Lee, *Eldorado Springs*
West Central	Warren Lovinger, *Nevada*
West Central	Wayne Morton, *Osceola*
West Central	Bill Turner, *Nevada*

Seventh District

Metro Med of K.C.	Elizabeth Andes, *Kansas City*
Metro Med of K.C.	Jennifer Ashby, *Kansas City*
Metro Med of K.C.	Keith Ashcraft, *Kansas City*
Metro Med of K.C.	Robert E. Binda, *Kansas City*
Metro Med of K.C.	William Bradshaw, *Kansas City*
Metro Med of K.C.	Alfred Caruso, *Kansas City*
Metro Med of K.C.	Frederick G. DeFeo, *Kansas City*
Metro Med of K.C.	Linda Dorzab, *Kansas City*
Metro Med of K.C.	Jean Ellis, *Kansas City*
Metro Med of K.C.	Fred Fayne, *Kansas City*
Metro Med of K.C.	Melvin L. Glazer, *Kansas City*
Metro Med of K.C.	Mala R. Gupta, *Kansas City*
Metro Med of K.C.	John C. Hall, *Kansas City*
Metro Med of K.C.	Pierre W. Keitges, *Kansas City*
Metro Med of K.C.	Ted E. Lockwood, *Kansas City*
Metro Med of K.C.	Loretta S. Loftus, *Kansas City*
Metro Med of K.C.	Donald E. McIntosh, *Kansas City*
Metro Med of K.C.	Peter H. Mestad, *Kansas City*
Metro Med of K.C.	Carl M. Myers, *Kansas City*
Metro Med of K.C.	Richardson Noback, *Kansas City*
Metro Med of K.C.	Gale Oleson, *Kansas City*
Metro Med of K.C.	Donald A. Potts, *Kansas City*
Metro Med of K.C.	Dorothy D. Reister, *Kansas City*
Metro Med of K.C.	Christine Robb, *Kansas City*
Metro Med of K.C.	Charles C. Roberts, *Kansas City*
Metro Med of K.C.	Lawrence A. Rues, *Kansas City*
Metro Med of K.C.	Carl R. Strauss, *Kansas City*
Metro Med of K.C.	Frank Titterington, III, *Kansas City*
Metro Med of K.C.	Jane Wats, *Kansas City*
Metro Med of K.C.	Michael L. Weaver, *Kansas City*
Metro Med of K.C.	Daniel S. Whitman, *Kansas City*
Metro Med of K.C.	Jay Yedlin, *Kansas City*
Metro Med of K.C.	Lisa J. Zacharewicz, *Kansas City*

MSMA President Gary Dyer, M.D., gets together with General Session speakers Palma Formica, M.D., AMA Board of Trustee and Ed Kelsay, general counsel for the Oklahoma State Medical Society.

Eighth District

Dallas-Hickory-Polk-Dade	J. Gustavo Nix, *Bolivar*
Greene	Lynn Anderson, *Springfield*
Greene	Darrell Domann, *Springfield*
Greene	Charles H'Doubler, *Springfield*
Greene	James Gessler, *Springfield*
Greene	Michael Hoeman, *Springfield*
Greene	Norman Knowlton, *Springfield*
Greene	Keith LaFerriere, *Springfield*

Greene	Hal Lurie, *Springfield*
Greene	Aly Mohsen, *Springfield*
Greene	Wayne Miles, *Springfield*
Greene	Lisa Ovens, *Springfield*
Greene	Stanley S. Peterson, *Springfield*
Greene	Arteso Raborar, *Springfield*
Greene	Catherine Schane, *Springfield*
Greene	Diana Spade, *Springfield*
Greene	Dan Sullivan, *Springfield*
Greene	Janie Vale, *Springfield*
Greene	Norman Wall, *Springfield*
Greene	Arlen Winsky, *Springfield*
Greene	Robert Zahn, *Springfield*
Jasper	Robert Brigden, *Joplin*
Jasper	W.C. Dandridge, Jr., *Joplin*
Jasper	John Montgomery, *Joplin*
Jasper	Ira Joe Pryor, *Joplin*
Jasper	W. Dale Rankin, *Joplin*
Jasper	Howard Roberts, *Joplin*
Jasper	Duane Sherrod, *Joplin*
Jasper	Paul B. Anderson, *Neosho*
Jasper	J.L. Bizek, *Aurora*
Jasper	Thomas Macdonnell, *Marshfield*

Ninth District

Mid-Missouri	Barry Bass, *Rolla*
Mid-Missouri	James Bass, *Rolla*
South Central	Laureano Mayuga, *Cabool*
South Central	Felix Santiago, *Mountain View*
South Central	C.F. Smith, *Willow Springs*
South Central	Thomas Stubbs, *West Plains*
Butler-Wayne-Ripley-Carter	Subhash Gujarati, *Poplar Bluff*
Butler-Wayne-Ripley-Carter	Ann Peick, Poplar *Bluff*
Butler-Wayne-Ripley-Carter	Kirby Turner, *Poplar Bluff*
Cape Girardeau	Theodore J. Glenn, *Cape Girardeau*
Cape Girardeau	J. Marshall Jung, *Cape Girardeau*
Cape Girardeau	Mark C. Kasten, *Cape Girardeau*
Cape Girardeau	Edwin J. Master, *Cape Girardeau*
Cape Girardeau	Thomas C. Sparkman,*Cape Girardeau*
Cape Girardeau	Gregory A. Tobin, *Cape Girardeau*
Dunklin	Nicholas Robinson, *Kennett*
Jefferson	Alfred D. Shaplin, *Crystal City*
Jefferson	Eugemio Verzola, *Herculaneum*
Mineral Area	David J. Auner, *Ironton*
Mineral Area	Edward H. Dumontier, *Farmington*
Mineral Area	Darrell L. Griffin, *Farmington*
Mineral Area	R.A. Huckstep, *Farmington*
SEMO	Donald Cento, *Sikeston*
SEMO	Kenneth Dempsey, *Sikeston*
SEMO	Theodore Roberts, *Sikeston*
SEMO	William Shell, *Sikeston*
SEMO	Fred Thornton, *Sikeston*

Delegates-At-Large

Jo-Ellyn M. Ryall, Speaker, *St. Louis*
James B. Wolfe, Vice Speaker, *Springfield*

Past Presidents

H. Peter Ekern, *Mexico*
Joseph L. Fisher, *St. Joseph*
Walter German, *Springfield*
E.T. Hansbrough, *Poplar Bluff*
John N. Martin, *St. Joseph*
Howard J. McAlhany, *Springfield*
Marvin Singleton, *Joplin*
Ronald A. Youmans, *Kansas City*

Deans of Medical Schools

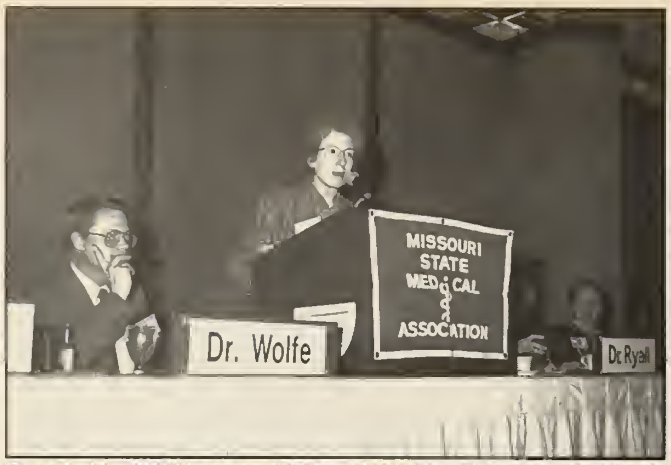
Lester R. Bryant, *Columbia* (Missouri University School of Medicine)
William Stoneman, *St. Louis* (St. Louis University School of Medicine)

MSMA President Gary A. Dyer, M.D., gave the invocation. Donald Fakhoury, M.D., Chairman of the Committee on Credentials, reported that seven officers, 20 councilors and 121 delegates were present. The minutes from the 132nd Annual Meeting were approved as published in the July 1990 issue of *Missouri Medicine.*

Speaker Ryall announced the members of the various reference committees: Reference Committee A — Lawrence A. Rues, (*Chairman*), Christopher Pittman, (*Resident Section*), John Dehner, Wayne Morton, and Laura C. Carlson (*Medical Student*); Reference Committee B — William J. Crowley, (*Chairman*), Gordon M. Goldman, Lynn A. Anderson, James F. Conant, and Gregory A. Hill, (*Resident Section*); Reference Committee C — Vernon H. Balster, (*Chairman*), R. Evan Crandall, Mark Kasten, Jeffrey G. Copeland, and Daniel S. Whitman.

Dr. Dyer then addressed the House and his remarks appear on page 400 of this issue. Speaker Jo-Ellyn Ryall then invited Dr. Dorothy D. Reister, President-Elect to give her remarks. Dr. Dyer then invited MSMA Auxiliary President Carol Sparkman to address the House, and recognized Mary Hunkeler as President-Elect of the Auxiliary. Mrs. Sparkman's remarks appear on page 404 of this issue.

Following her remarks, Mrs. Sparkman asked Dr. Dyer to assist her in distributing the AMA-ERF checks to Missouri's four medical schools. J. Stuart Munro, M.D., accepted the checks for the University of Missouri-Kansas City School of Medicine. UMKC received $3,763.96 in designated contributions and $5,206.53 in undesignated contributions. Representing the University of Missouri-Columbia School of



Carol F. Williams, M.D., MSMA President-Elect, addresses the House of Delegates during the 133rd Annual Convention.

MISSOURI STATE MEDICAL ASSOCIATION
Dr. Ryall
Dr. Dyer

Gary Dyer, M.D., 1990-1991 MSMA President, presents the 1991 Citizenship and Community Service Award to Dean F. Werner, M.D., of Kansas City.

Medicine, Dr. Hugh E. Stephenson, Jr., M.D., accepted $6,971.13 in designated contributions and $7,248.78 in undesignated contributions. William Stoneman, M.D., of St. Louis University School of Medicine, accepted $11,418.17 in designated contributions and $14,915.57 in undesignated contributions. On behalf of Washington University School of Medicine, Jo-Ellyn M. Ryall, M.D., accepted $6,757.97 in designated contributions and $7,382.16 in undesignated contributions.

Next, Dr. Dyer invited Dean F. Werner, M.D. to the podium to receive the 1991 Citizenship and Community Service Award. Dr. Werner, a specialist in industrial medicine, received his undergraduate education at Kansas City Junior College and received his bachelor of arts degree from Westminster College in Fulton, MO. He is a 1948 graduate of the University of Oklahoma College of Medicine, and completed his medical residency training at Denver General Hospital in Denver, CO. Dr. Werner and his wife, Phyllis, have been involved in numerous civic and charitable organizations within Kansas City and the surrounding community. In October 1987, Dr. and Mrs. Werner received the Mayor's Prayer Breakfast Citation for "Distinguished Service to Our Community."

Following his retirement from medical practice, Dr. Werner became quite involved in the Dream Factory, an organization that tries to fulfill the dreams of terminally ill and handicapped children. He serves on the organization's board of directors. His other civic involvements include service with the Kansas City Chamber of Commerce, the Friends of Art and the Kansas City Museum Association, the Kansas City Philharmonic Associates, the University of UMKC, the American Cancer Society, and the Honorable Order of Kentucky Colonels. Among the medical offices he has held, Dr. Werner served as president of the American Association of Railway Surgeons in 1979, and now serves as secretary for that organization.

Dr. Werner has long been active in the St. James Lutheran Church, serving on the Church Council for two three-year terms and teaching a senior high Sunday School class for seven years.

Others in his community have put the spotlight on Dr. Werner. In 1989, he was featured on KMBC Channel 9's "Harmony in a World of Difference" program as a person whose life makes a difference. In the May 1990 issue of *Kansas City Life Magazine*, he was featured in an article concerning his work with the Dream Factory.

Dr. Dyer presented Dr. Werner with a plaque, and Dr. Werner then addressed the MSMA House. He thanked the entire MSMA membership and encouraged any doctor who dreaded retirement to relax. He said that in retirement, boredom is *not* a given since there are so many organizations who will gladly take your volunteer time. By volunteering, Dr. Werner said, physicians will be able to continue to do what they have done in a lifetime in the medical profession — serve other people.

Following Dr. Werner's remarks, Dr. Dyer invited special guest, Palma E. Formica, M.D., a member of the AMA Board of Trustees, to address the House of Delegates. Dr. Formica was elected to the Board last year and prior to that served as chairman of the AMA Council on Long-Range Planning and Development. She has been a delegate to the AMA, representing the Medical Society of New Jersey since 1983. Dr. Formica is a past president of the Medical Society of New Jersey, and is also on the Board of Directors of the New Jersey State Medical Underwriters, a professional liability insurance company, and is currently its secretary-treasurer.

Vice-Speaker Wolfe then announced that the

MISSOURI
STATE
MEDICAL
ASSOCIATION

Special Guest Palma Formica, M.D., AMA Board of Trustee, addresses the First Session of the House of Delegates during the 133rd Annual Convention.

Reports of Officers, Committees and Commissions were referred as shown in the Delegates Handbook. He asked for supplemental reports. Dr. William Shell, Chairman of the Board of Directors of the Missouri Patient Care Review Foundation (MPCRF), then presented the report of the MPCRF. Following his report, Dr. Howard J. McElhany presented a report on MOMEDICO, the professional liability insurance company. During his report, Dr. McElhaney presented a check in the amount of $5,760 to Dr. Jack Croughan in support of the Physicians Health Program (PHP). Dr. Croughan is the medical director of the PHP.

Vice Speaker Wolfe then announced that the Supplemental Report of the Council for their meeting held April 3 had been distributed to the House and would be referred to Reference Committee B.

Dr. Dyer then announced his appointments for the 1991 Committee on Nominations whose members are chosen from each Councilor District:

First District:	Donald Fakhoury, *Kansas City*
Second Distict:	C.C. Cohrs, *Moberly*
Third District:	Newton B. White, *St. Louis*
Fourth District:	Jeffrey Copeland, *St. Charles*
Fifth District:	Emily Guyer, *Columbia*
Sixth District:	Robert Magee, *Eldorado Spring*
Seventh District:	William Case, *Kansas City*
Eighth District:	Walter German, *Springfield*
Ninth District:	L.G. Mayuga, *Cabool*
Tenth District:	Tom Sparkman, *Cape Girardeau*
Resident Physician Section:	Victoria Muehlebach, *Kansas City*
Hospital Medical Staff Section:	Charles Barbee, *Columbia*

Speaker Ryall then called attention to the insert in the Delegates Handbook that listed the status of the MSMA House of Delegates resolutions from the MSMA Annual Meeting in 1990. This list was supplied to the delegates for their information.

One late resolution requiring a two-thirds majority to become official business, was introduced to the House under New Business. The late resolution was introduced by Dr. Patrick Harr, M.D., representing the MSMA Council. The resolution concerned the establishment of a risk management program. It was approved for House business, numbered 30 and referred to Reference Committee A.

At the request of the Speaker, the House stood and observed a moment of silence in honor of those MSMA members who had died since the 1990 Annual Meeting.

After a few short announcements, the First Session of the MSMA House of Delegates was adjourned.

Dr.
Dr. Formica

Gary Dyer, M.D., 1990-1991 MSMA President, presents a Legislative Award to Senator Ed Quick during the Second Session of the House of Delegates.

SECOND SESSION

The Second Session of the MSMA House of Delegates was called to order by Speaker Ryall at 4:00 p.m., on Friday, April 5, 1991.

Dr. Donald Fakhoury gave the Credentials Committee Report, stating that seven officers, 20 councilors, and 209 delegates were present and constituted a quorum.

Dr. A.J. Campbell then addressed the House. He introduced a special guest at the 133rd Annual Meeting, Dr. Jim Barnett of Mississippi, president of the Southern Medical Association. Dr. Barnett then briefly addressed the House.

Following Dr. Barnett's remarks, Dr. Jack Croughan, medical director of the Physicians Health Program, gave a brief public service announcement concerning the PHP. He reiterated the fact that the entire process of referring physicians to PHP is strictly confidential. He encouraged those present to use the program, as it exists to help.

Dr. Gary Dyer then presented the 1991 Legislative Awards to several members of the Missouri General Assembly. Receiving special plaques of appreciation for their service on behalf of medicine were: Senator Ed Quick (*17th District*), Senator Harold Caskey (*31st District*), Representative Tim Kelley (*6th District*), Representative Sandra Reeves (*30th District*), Representative Bob Sego (*44th District*), and Representative Joe Bock (*33rd District*). Senator Caskey and Representative Bock could not attend the annual meeting and will receive their plaques at a later date.

Following these presentations, Speaker Ryall invited Dr. Donald Fakhoury to the podium. He presented the report of the Nominating Committee that proposed the following slate of officers for 1990-1991:

President-Elect:	Dr. Carol F. Williams, *St. Louis*
Vice Presidents:	Dr. Donald McIntosh, *Kansas City* Dr. William Huffaker, *St. Louis* Dr. Ernest Lorenc, *Springfield*
Speaker of the House:	Dr. Jo-Ellyn M. Ryall, *St. Louis*
Vice Speaker of the House:	Dr. James B. Wolfe, *Springfield*
AMA Delegates:	Dr. Melvin C. Kasten, *Cape Girardeau* Dr. Keith Ashcraft, *Kansas City* Dr. Vernon Balster, *St. Louis*
AMA Alternate Delegates:	Dr. David W. Hall, *Springfield* Dr. H. Peter Ekern, *Mexico* Russ Holman, *medical student, St. Louis*

Speaker Ryall then moved the House business to the Reports of the Reference Committees. Reference Committe Reports were heard in the order of Committee A, then Committee B, then Committee C.

Please note that House Actions on all resolutions appear in the section "Resolutions" on pages 408-413 in this issue.

REFERENCE COMMITTEE A

Lawrence A. Rues, M.D., presented the report of Reference Committee A. The following items were placed on the Consent Calendar:

Report of the Committee on Constitution & Bylaws
Resolution 13, Bicycle Safety Helmets

Norman P. Knowlton, III, M.D., MSMA Secretary, raises a point for consideration on a resolution discussed in Reference Committee B.

The Consent Calendar was adopted by the House. The Committee then made recommendations on the following resolutions:

Resolution 4	MSMA Position on Dispensing Medications
Resolution 10	Physician Support for Senate Bill 2934, the Hatch Bill
Resolution 11	Regulation of Managed Care
Resolution 16	Test for AIDS
Resolution 20	MSMA Position on the Classification of HIV Infection
Resolution 23	MSMA Position on the Removal and/or Repair of Non-Oral Facial Lesions by Oral Surgeons
Resolution 26	Blood Alcohol Level in the State of Missouri
Resolution 28	Banning the Sale of Fireworks

REFERENCE COMMITTEE B

Dr. William J. Crowley, chairman of Reference Committee B, announced that his committee had placed the following items on the Consent Calendar:

Report of the President
Report of the MSMA Auxiliary
Report of the Committee on Legislative Affairs
Report of the Secretary
Report of the Treasurer —MSMA Financial Statement
Report of the Judicial Council
Report of the Executive Vice President
Council Minutes
Report of the Missouri State Medical Foundation — MSMF Financial Statement
Report of the Committee on Interspecialty Medicine
Report of the Commission on Public Affairs
Report of the Committee on Publications
Report of the Council

The Consent Calendar was adopted by the House. The Committee then made recommendations on the following resolutions:

Report of the Ad Hoc Committee on "Sunsetting"

Resolution 8	Missouri State Medical Association Monetary Contributions to Campaigns of MSMA Members for National American Medical Association Offices
Resolution 12	Improvement and Expansion of Medicaid Services by Ajudication
Resolution 14	Cardiopulmonary Resuscitation Training for High Schoool Students
Resolution 15	Ambiguous Reporting by National Practitioner Data Bank (NPDB)
Resolution 17	MSMA Position on the National Practitioner Data Bank
Resolution 18	MSMA Position on Hunter Education Courses in the State
Resolution 19	Medical Ombudsman to Investigate Bureaucratic Incongruities
Resolution 27	Inappropriate Use of Drug Enforcement Administration (DEA) Numbers and Inappropriate Use of Professional Relations in Market Research
Resolution 29	Disability Insurance for Resident Physicians

Reference Committee C

Dr. Evan Crandall, chairman of Reference Committee C, announced that his committee had placed the following items on the Consent Calendar:

Report of the Commission on Continuing Medical Education and Health Manpower
Report of the Physicians Health Committee
Report of the Commission on Medical-Legal Affairs

Resolution 5	Insurance Carriers' Discriminate Denial of Full Entitled Payments to Allergy Patients
Resolution 7	Direct Admission on Medicare Patients to Long-Term Care Unit
Resolution 22	Medicare Program
Resolution 24	Access to Medical Record Information
Resolution 25	Confidential Information Requested by Insurance Companies

The Consent Calendar, minus Resolution 22, was adopted by the House.
The Committee then made recommendations on the following resolutions:

Resolution 1	MSMA Position on the PRO System
Resolution 2	MSMA Position on HCFA Rule that Only Physician or Staff May Complete Certificates of Medical Necessity for Medicare Oxygen
Resolution 3	MSMA Position on DRG's
Resolution 6	Guidelines for Determining Need for Hospital Based Observation or Admission Status
Resolution 9	Continued Support of H.S. 4475, "Medicare Physician Regulation Relief Amendments of 1990"
Resolution 21	MSMA Position on the Laboratory Rules Proposed by HCFA

Following the final report, Speaker Ryall asked for new business of the House. Dr. Thomas Macdonnell, who also serves as a Missouri State Representative in the General Assembly, addressed the House briefly, giving an update on some of the action of the General Assembly concerning medical issues. Speaker Ryall then reminded everyone to acknowledge the beginning of Daylight Savings Time by setting their clocks ahead Saturday before retiring for the night, so that they would be on time for Sunday's final session of the House of Delegates.

Having no further new or old business, the Second Session of the MSMA House of Delegates was adjourned.

THIRD SESSION

The Third Session of the MSMA House of Delegates was called to order by Speaker Ryall at 7:30 a.m., Sunday, April 7, 1991. Dr. Donald Fakhoury presented the Report of the Committee on Credentials, stating that eight officers, 20 councilors, and 232 delegates were present. This represented a quorum and the report was adopted.

The first item on the agenda was the election of officers. These individuals were presented by the Nominating Committee during the Second Session (See page 394 for complete list) and the nominations were closed during that Session. The slate of officers for 1991-1992 was unanimously elected by the House. Dr. Williams, the new president-elect, briefly addressed the House.

Having no new or unfinished business, Speaker Ryall then called on MSMA Secretary Dr. Norman P. Knowlton to give the Report of the Election of Councilors and Vice Councilors. These elections were held in the respective district caucuses:

Second District
Carl Kruse, *Councilor*
Robert Tompson, *Vice Councilor*

Third District
Gordon Goldman, *Councilor*

Senator Pat Danner speaks at the Public Affairs Breakfast Saturday, April 6, during the 133rd MSMA Annual Convention.

At the Public Affairs Breakfast held during the 133rd MSMA Annual Convention, several MSMA members take advantage of the opportunity to share ideas on medical issues.

Robert Miller, *Councilor*
Arturo Montes, *Councilor*
Meredith Payne, *Councilor*
Paul Petruska, *Vice Councilor*

Fourth District
Sam Farrell, *Councilor*
Jeffrey Copeland, *Vice Councilor*

Sixth District
A.J. Campbell, *Councilor*
Jerry Meyer, *Vice Councilor*

Seventh District
Steven E. Buie, *Councilor*
Frederick Hahn, Jr., *Councilor*

Eighth District
David Hall, *Councilor*
Robert Brigdon, *Vice Councilor*

Tenth District
Melvin C. Kasten, *Councilor*
William Shell, *Vice Councilor*

Medical Student Section
Andrew Blatt, SLU, *Councilor*
Sherri Raissdana, SLU, *Vice Councilor*

Resident Physicians Section
Robert McQuillan, *Councilor*
Karen Zanol, *Vice Councilor*

Hospital Medical Staff Section
Charles Barbee, *Councilor*
Paul Petruska, *Vice Councilor*

Dr. Knowlton then conducted the installation of officers.

After those elected had taken the oath of office, Dr. Dorothy Reister announced her appointments of committees and commissions chairmen **(Please note that a complete list of all MSMA standing committees and commissions will appear in the August Directory issue of *Missouri Medicine*).**

Committee on Constitution and Bylaws
Mary McCaffree, *Jefferson City*

Committee on Legislative Affairs
Jerry Murrell, *Columbia*

Physicians Health Committee
Thomas Anderson, *Columbia*

Committee on Planning
Phillip Hornbostel, *Sedalia*

Committee on Continuing Education and Health Manpower
John Renner, *Kansas City*

Commission on Medical Economics, Third-Party Medicine and Governmental Relations
Frederick DeFeo, *Kansas City*

Commission on Medical-Legal Affairs
Joseph Corrado, *Mexico*

Commission on Public Affairs
Michael Hoeman, *Springfield*

Commission on Interspecialty Medicine
Stephen Slocum, *St. Louis*

Publications Committee
Donald G. Sessions, *St. Louis*

Judicial Council
E.T. Hansbrough, *Poplar Bluff,* five-year term

Professional Liability and Tort Reform Blue Ribbon Committee
Patrick Harr, *Maryville*

Speaker Ryall announced that the 134th Annual Convention will be held April 9-12, 1992 at the Adams Mark Hotel in St. Louis. The 135th Annual Convention will be held March 31 - April 4, 1993 at the Lake of the Ozarks. The 136th Annual Convention will be held April 6-10, 1994 at the Westin Crown Center in Kansas City. The 137th Annual Convention in 1995 will be held in St. Louis, with dates to be given at a later date. An invitation was extended to hold the 1996 Annual Convention at the Lake of the Ozarks.

The Speaker then adjourned the 133rd Annual Convention of the MSMA House of Delegates on April 7, 1991. ■

Editor's Note: Complete minutes for the 133rd Annual Convention are on file at the MSMA Headquarters, 113 Madison, Jefferson City, MO. Any MSMA member interested in viewing the complete report may do so at the MSMA Office.

Dorothy D. Reister, M.D.

Dr. Dyer, fellow members, honored guests and staff, it is an honor and a privilege to assume this office, and I want to thank all of you for coming. We have had an excellent year with Dr. Dyer in this position, and I have big shoes to fill. At the outset I will say as I did when I chaired the Council — I don't tell jokes well, so I don't tell jokes and also, I am feminine, but not feminist so unisex titles such as chairman are just fine, as they have been for centuries.

As I look toward the coming year, I'm enlisting the help of everyone here — the physicians, the Auxiliary, MSMA staff, my office staff and my partner and the understanding of my family.

I come to this point in my life through a series of circumstances, all to my advantage. My sisters and I were fortunate to have parents who never discouraged us from any chosen field of endeavor, especially just because we are women. From my earliest childhood recollections I have wanted to be a physician. This goal remained as I grew up in Chillicothe, as I attended college and finally when I went to medical school. I am the fourth generation physician in my family. My great-grandfather and grandfather practiced in Lafayette, Indiana and the latter was president of the Indiana State Medical Association and was a vice-president of the AMA. My uncle practiced in California. This was background, but now it is time to look ahead.

1991-1992 MSMA President Dorothy D. Reister gives her inauguration speech at the 133rd Annual Convention.

We are in a time of great pressures, especially from governments. April 15 is just ahead, so the IRS is pressuring. There are year-long, constant pressures from Federal programs such as HCFA, the Department of Health and Human Services, and the State government offices, bureaus and boards. The various insurance plans and the hospitals pressure us. We as physicians and as members of organized medicine are still the best and sometimes the only advocates for our patients' health care access, availability and quality. Our efforts are on-going and must escalate in a pro-active fashion. Who better knows what patients really need in health care than those who have it to offer? Computers and statistics do not have a human caring heart and treating hands as does the physician. If only each and every physician in the state would join hearts, hands and minds to speak for our patients! Too many are willing to say "Let George do it." As professions go, we are the most scrutinized, policed and regulated profession in America, quoting Dr. Faria of Macon, Georgia. Why is this? As Dr. James Todd said, "Accountability is a part of professionalism," although we seem inundated with regulations. As we know, though, medicine is a combination of science and art and the latter cannot be properly regulated and it should not be. However, if we are to be proactive, we must stand in front instead of being dragged kicking and screaming into programs involving our patients' health care. Our Surgeon General recently said, "It takes courage to take a stand." Never were those words more true than in medicine today.

This is early spring of 1991 — kite flying time. Most of us have flown kites, sometimes more successfully than other times. What does it take for successful kite flying? First, we need a properly constructed kite with stability of frame, yet also with flexibility. The cover should be smooth for proper flight. Attached to it is the second need — a proper tail. This is composed of many pieces tied firmly together to give the proper balance and pull to allow the kite to lift. Third, there is the kite string which must be strong enough to hold against the soaring kite, with good tensile strength, but not so heavy that it drags too much. It is the communication means between the kite and the kite-flyer; it permits further lifting, it pulls just enough to take advantage of the wind, and it guides it away from obstacles. Fourth, there is the right wind. Gusty unpredictable winds make it difficult to fly and too little wind makes it impossible. Fifth, is the ground control. With open ground to run with the kite to start and a breeze to catch and carry it into the sky, balanced by the tail and anchored to the kite flyer, we have a very successful and beautiful effort soaring skyward.

Why am I talking about kites? Where do we fit into the kite-flying scheme? Each of us has a role and he can choose where he best fits into the scheme. All of us here are the ground control and anchor, controlling the kite string. That string is communication at its best with messages going both directions helping toward ultimate success. Council and MSMA staff make up the tail, giving stability and balance as well as helping the aerodynamics of flight to allow the kite to reach farther heights. Missouri State Medical Association is the kite! It's flying as a result of all parts. The better the parts, the better the kite flies. As you see, each part is essential to the others; no part stands alone. Picture the sad situation of a broken kite, or the non-functioning kite tail lying on the ground unattached, or the string broken, or the lack of interest of the kite flyer, and the absence of wind. Our soaring MSMA kite is the visible proof of the parts of the whole melded into a successful unit.

The one part which desperately needs improving is that part standing on the ground holding onto the string. We know that there will be people standing by watching, commiserating with failure and cheering with success, although they had nothing to do with the success. They watch, but don't participate for various reasons and we've heard them all — "don't have the time, what have you done for me, really don't care, and DON'T BOTHER ME!" We all know people with this attitude, but they're not here tonight — they're out THERE someplace. With every member here holding onto the kite string, we need to attract the others. If each person here would lock arms with one of the on-lookers, bringing them into the exciting kite-flying, what a spectacular group it would be!

Remember also that all parts of the whole must be protected from defeat. The kite must not be allowed to fall in such a way that it is destroyed. The tail must not snag on an obstacle, the string also must not be allowed to snarl in a tree or be fouled in another kite s tring, and the controllers must not stumble over a rock or hillock and must help their fellow kite-string holders enjoy the success of a soaring kite. Now with all that strength, nothing can stop us. Imagine the effect of our kite flying over the state capitol in Jefferson City or Congress or the AMA. How much greater could be our achievements if we were that totally committed unit flying our big MSMA kite!

This picture is a dream, but dreaming brings goals toward which we work. We need every part of this kite system, but our weakest part is our base of stringholders. Improvement in this weakness is a responsibility of every member. If every member would bring another and another and another to hold onto that string, to help guide the kite, what a formidable sight it would be! As members bring new members, we want to recognize and publish the fact and reward in some way this increase in our number of fellow members — fellow stringholders. I'm an optimist and an idealist and I think this dream is attainable, but it needs to have the cooperation and committment of every one of us. This is not something we can say "Let George do," but we need to say "**Count on me.**" Please join me in flying our MSMA kite high, high, HIGH.

Thank you.

■

Gary A. Dyer, M.D.

Madam Speaker, President elect Reister, Dr. Formica, Officers, Councilors, Delegates, Ladies and Gentlemen:

Welcome to Kansas City and the 133rd Annual Convention of the Missouri State Medical Association. Thank you all for coming!

For this convention, I have five wishes:

- First, that we work hard and play hard;
- Second, that we study the issues thoroughly, debate vigorously, and develop a consensus package to be sent to the MSMA Council as the scope of work for the coming year;
- Third, that we support the activities of the Auxiliary;
- Fourth, that we go home with new friends, new ideas, and the desire to enrich and invigorate our component societies and sections; and
- Fifth, that we rededicate ourselves to bringing most non-member Missouri physicians into the Federation of organized medicine.

Traditionally, at this opening session of the House of Delegates the President of MSMA reflects on his year in office. One year ago I spoke of the MSMA Team concept and my pledge to be a team player. Six items were listed in my inauguration address[1] for special attention during my year as president. The first two involved the help of the Auxiliary. The list included:

1990-1991 MSMA President Gary A. Dyer, M.D., strikes a pose with the women who occupied the head table during meetings of the House of Delegates. From left: AMA Board of Trustee Palma Formica, M.D., 1991-1992 MSMA President Dorothy D. Reister, M.D., Dr. Dyer, Speaker Jo-Ellyn Ryall, M.D., MSMA Office Manager Rose Mahon, and MSMA President Elect Carol F. Williams, M.D.

1. Promotion of Physician and Spouse Voter Registration;
2. Continued Improvement in Physician and Spouse Grass Roots Political Action;
3. Implementation of the Blue Ribbon Medical Liability and Tort Reform Committee;
4. Promotion of the MSMA Physician's Charity Care Program;
5. Exploring the possibility of MSMA expansion in Capitol Screening Programs; and
6. Exploring the possibility of development of coalitions with the elderly.

Well, what about the MSMA Team of 1990-91? How did we do? Was it a year of impact or impaction?[2] In my view, we have had impact, and that is because of "special team" play and the work of our coaching staff. I would like to thank our coaches and assistants at this time. Without Royal Cooper and Cork Swarens assisted by Tom Holloway, Ron Ellison, Don Wilson, and the entire MSMA staff, our MSMA team would not be having a winning season. Royal, would you and your staff please stand? Lets give them a hearty round of applause.

One year ago I mentioned that

the MSMA team was often playing on more than one court at the same time. That can only be done, of course, by developing special teams with critical characteristics allowing favorable match-up with the situation, task, or opponent being faced. At this time, I would like to recognize special team play.

First, the MSMA Auxiliary. The Auxiliary is not an organization apart from, but is a special team of, the association. I would like to thank Carol Sparkman, Mary Hunkeler, and the Auxiliary for their efforts in physician and spouse voter registration, and grass roots political action. Their March 6th legislation day and luncheon was excellent. I would encourage more physicians to participate and take advantage of this event. It is the perfect time to meet with your Missouri legislators in the Jefferson City setting. I hope the Auxiliary will continue to train auxilians in voter registration methods and sign up all Missouri physicians and spouses not yet registered to vote.

The next special team for recognition is the Executive Committee. I would like for you to know that Drs. Reister, Williams, Kasten, Knowlton, and Cole gave full and frank discussion on all issues. Most recommendations of the Executive Committee were adopted by the Council. Would the Executive Committee please stand? Dr. Knowlton deserves special mention for his very hard work on MOMEDICO issues. Thank you Norm.

The MSMA officer visitation team consisted of Drs. Williams, Reister and myself. Dr. Arturo Montes was called upon for two special visitation missions. All scheduled appearances were kept except one. The Cape Girardeau cancellation, forced by bad weather, has been rescheduled for May of this year. I can truly say that we were warmly received in all parts of this great state. You know Dorothy and Carol. Arturo, would you please stand and be recognized?

The MSMA Council is a very critical, special MSMA team. Carol Williams did a superb job of keeping the meetings within time frame while allowing full discussion of issues. Would all members of the MSMA Council please stand? Thank you for a job well done.

Committees, Commissions, and Sections are vital MSMA special teams. Would all those present who served on a committee, commission, or in a special section during 1990-91 please stand? Each is important and we thank you for your support.

I would like to single out for special recognition this year the Blue Ribbon Medical Liability and Tort Reform Committee. Last year the House of Delegates endorsed the concept of the Blue Ribbon Committee and referred 12 resolutions to it. I appointed the committee consisting of Drs. Harr, Bukstein, O'Sullivan, Hasik, Orth, Hornbostel, Keitges, Cook, Bass, and Trueblood, with the Executive Committee of MSMA being ex-officio members. Dr. Pat Harr of Maryville was named chairman.

Three intense meetings of the committee were held and the report of the committee was unanimously endorsed by the Council at the August, 1990 meeting. Salient points include the following:

1. Risk management should receive as much attention by MSMA as tort reform, and MSMA should sponsor risk management educational events within the reach of all Missouri physicians.

2. The Blue Ribbon Committee should study all aspects of tort reform in search of those components that would lead to decreased medical liability premiums, if enacted into law.

3. The Blue Ribbon Committee should develop a tort reform package, supported by MSMA, that is ready for introduction in the Missouri legislature when the timing is right. The timing could be made right by federal legislation, changes in the Missouri legislature, or changes in general public attitude.

I suppose the timing could also be right if all trial attorneys developed bubonic plague.

4. MSMA should support federal legislation, such as the Hatch Bill, which could make it easier for states to get significant tort reform.

5. MSMA should continue as part of the Committee to Preserve Health Care coalition, and

6. Whatever else is done, the Missouri two-year statute of limitations should not be jeopardized. Pat Harr has done an excellent job in chairing the committee. I would like for Pat and his committee to stand.

The Missouri delegation to the AMA is a special team that worked very hard in 1990. Of nine MSMA resolutions taken to AMA, only one was not adopted by the AMA House of Delegates. George Bohigian served as chairman of the delegation at Annual 1990. Hugh Stephenson was elected chairman at Interim 1990. Hugh also served as chairman of Reference Committee E during the interim session. He will be running for re-election to the Council on Medical Education at the 1991 Annual Session. Resident Bob McQuillan was appointed to the Council on Ethical and Judicial Affairs by President Tupper. Would the Missouri AMA delegation please stand? We deeply appreciate all your good work for Missouri.

Most everyone in this room is part of MSMA's political action team. To prove the point, I would like to ask a series of questions and, if you fit the category, please stand and remain standing:

1. Please stand if you ran for public office in 1990;

2. Please stand if you serve on the MMPAC Board;

3. Please stand if you held a fundraising reception, coordinated fundraising for a candidate, or worked on a campaign;

4. Stand up if you are participating in PIP, the Key Contact Program, or if you testified before a committee;

5. Stand up if you gave money to a political campaign or PAC before, during, or after the election;

6. Stand up if you have contacted a Missouri legislator by phone, letter, or in person about a medical issue during the current session, and last but not least;

7. Please stand if you voted in the last election.

There you have it, the various aspects of the MSMA political action special team. You may be seated. As I mentioned in the April, 1991 President's Page,[3] democracy is not a pretty sight, but it works. Physicians are not above the political process and must fight for what they believe in and fight year after year. The legislative process is one of MSMA's neverending games.

The MSMA charity care team is improving. Our charity care program[4] asks that each physician give at least 50 hours of free hands-on charity medical care to indigent or Medicaid patients each year and keep a record of the gift. I am pleased to report that for 1990, 372 physicians have turned in charity care hours to MSMA. The total represents 144,870 patient contacts and 134,607 hours of care. I hope that MSMA will continue to maintain a strong position in charity care to the truly needy in Missouri.

The fifth item for special attention was exploration of Capitol Screening Clinics for legislators and staff. As a first step MSMA sponsored a Skin Cancer Detection Clinic at the capitol on March 6. Five dermatologists screened 105 legislators and staff. The capitol screening team consisted of Drs. Gunn, Swinfard, Clark, Zurowski, Worth, and myself. Dr. Ron Swinfard was director. As we were warmly received, another screening clinic is planned for next year. I would urge other specialties to get involved. Turnout of legislators depends on timing. I believe one specialty screening at a time works best.

And last, but not least, a most important MSMA special team is this House of Delegates with its Speaker, Vice-Speaker, Delegates, Alternate Delegates and Reference Committees. You are the special team of the moment, the team that sets the stage and the scope of work for the coming year. You are the team that reviews all our work for the past year and ultimately gives us passing or failing marks. You tell us whether or not we have had impact or impaction.

Was the 1990-91 MSMA Team perfect? In my view we had a good team with some great games with room for improvement. Where are the soft spots? In basketball terms, I believe the areas for scrutiny include: 1) Recruitment; 2) Basic skills; 3) Team concepts; 4) Transition game; 5) Pressure situations; and 6) Scheduling and financing.

The MSMA Team would be most effective if nearly all Missouri physicians were members. Successful recruitment would give us clout, financing, player pools for depth in special teams, as well as the potential for playing on more courts at the same time. I think it is time to put our man-to-man offense[5] in high gear and reach each Missouri physician not now a member of MSMA. I think it is time for some component societies to stop fouling and drop the "locals only" concept. Physicians in 1991 do not have many friends. We must be friends to each other. We must become Federation minded.

The basic skills in basketball are dribbling, passing, pivoting, moving without the ball, defensive positioning, shooting and communication.[6] MSMA basic skills are different but are very fundamental to our success on the courts. I believe they include understanding issues, participation, negotiation and effective communication,[7,8] consensus development, and may include positioning, both defensive and offensive. You may think of others. These basic skills are best developed through joining the MSMA Team and practice, practice, practice.

MSMA is made up of components, specialty societies, and sections of various sizes. It is easy to pivot in the wrong direction and say, "We don't like what MSMA is doing. We are going our own way!" or "What is MSMA doing for me?" MSMA is you,[9] MSMA is me, MSMA is us! Our greatest impact comes through presenting a unified front. This means clout through numbers, consensus, and coordinated action. This is the "team concept." We will get much farther as a team than as a component here, a specialty society there, or an individual working alone.

We need to work on our transition game. This becomes most obvious during the legislative session. When the game tempo picks up and activities on bills are moving fast and furious, it is often hard for staff to find individuals to testify at hearings, or contact legislators promptly. The transition game at the legislature will be much easier to handle if the basic skills of legislator contact have been well worked out before the sessions begins.

The MSMA Team does not face full-court pressure often, but when we do, we must be able to see the full court clearly before launching a pass. Meeting with MATA on tort reform is one example. We must see the legislature, public mood, and court system clearly before launching a major tort reform package.[10] We do not want the ball stolen, blocked, or stuffed down our throats. Study and patience is required. I belive universal health care will be the pressure issue of the next few years.

Each year resolutions are presented asking MSMA to get involved in new issues which, in effect, add games to the schedule. More games require more players, coaching staff and money to field a winning team. If not, the existing players are spread too thin. I believe we need to figure out which games are the big ones; we need to prioritize the issues according to importance to us and our patients, and concentrate our special teams on those courts. We must maintain a manageable schedule.

In two days the record of this team will be in the books. A new team will be on the court. We will have many returning players with added experience. The Association will be in good hands.

I wish to thank you for allowing me to serve as your president this past year. I have truly enjoyed every game. Thank you very much!

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Carol Sparkman

Madam Speaker, Dr. Dyer, Dr. Formica, Delegates and Guests: It is indeed a pleasure for me to bring to you this report of the Missouri State Medical Association Auxiliary.

Just one short year ago I accepted the honor and the responsibility of the office of the president of the MSMA Auxiliary. As I embarked on this very special journey, I chose for my theme, Facing the Future — Together We Face the Future, Together We Are the Future. The future is one year closer and that future continues to be fraught with many changes.

Change is one thing that is inevitable. It goes on in ourselves, our families, and in the medical profession. Sometimes it's hard to tell the nature of that change until time passes. Other times we know that we are in the midst of it and it's exciting or disquieting or perhaps both.

Clearly, the practice of medicine has changed and is changing dramatically. The MSMA Auxiliary has gone through many changes since its beginning in 1924. Yet through it all, the purposes of the Auxiliary have remained the same: to assist in those programs of the MSMA that improve the health and quality of life for all people; to uphold the programs of the AMA; to promote health education; and to encourage participation of volunteers in activities that meet health needs.

MISSOURI
STATE
MEDICAL
ASSOCIATION
Dr

Carol Sparkman, MSMA Auxiliary President addresses the House of Delegates.

Dr. James Todd, Executive Vice-President of the AMA, had some interesting things to say about change when he spoke at the AMA Auxiliary Leadership Confluence I that I attended in Chicago last October.

He said, "Change is not an event. Change is a journey which is never finished. And along the way there will be conflicts and differences of opinion. Those who would succeed must be flexible, responsive and responsible."

He is exactly right. Change can be a time of renewal, a time for new ideas to strengthen old values. I see much evidence of that in our auxiliary.

I want to report on what your auxiliary has been doing this past year to try to meet these needs. Many of our component auxiliaries are using innovative ideas to promote the mental and physical well being of our adolescents, teenagers, and our elderly. They are participating in the AMA Auxiliary plan to improve the health of adolescents with a focus on a healthier youth for the year 2000.

Let me share how your auxilians are participating. In Boone County they are working in cooperation with the Columbia public schools on the development of four new interactive exhibits to be integrated into the school health curriculum and they have provided the video, "Science and Art in the Name of Healing" to the high school clubs with members interested in pursuing careers in medicine.

In Clay-Platte County, they contribute funds to Reach Out American, Inc., a life education mobile center offering a preventive approach to legal and illegal drug abuse.

In Jasper County, they developed a resource guide entitled Youth Yellow Pages, two years in preparation, and they were made available last fall to area high school students.

In Cape Girardeau, eight auxiliaries assist with Project Charley in grades two and four, teaching adolescents about the dangers of substance abuse.

In St. Louis, auxilians support Operation Childsafe that promotes safety in an effort to reduce infant mortality and morbidity in the St. Louis area.

In Cole County, auxilians developed and presented a three-hour class on childhood illness and emergencies titled "Parenting and the Care of Your Child," and an auxilian formed a breast cancer support group called ETC, Encouragement Through Caring.

In Buchanan County, they support Camp Quality, a camp for children with cancer. They support it with both their financial and volunteer support. They also sent medical supplies to the poor in the Solomon Islands and Equador and they held a second seminar on Communication in the Medical Marriage.

In Greene County, they collected donations and purchased supplies for the Kitchen Clinic, a free clinic staffed by Greene County physicians who volunteer their time without compensation. They contribute moneys in support of Ronald McDonald House and provide volunteers to present short seminars on health subjects relevant to team problem areas at three junior high schools.

In Kansas City, Metro Med has written, produced, directed, and is marketing an exercise video called "Stay Fit," targeted for the elderly, the shutins and the handicapped.

Through projects like these, our influence is being felt in health awareness. We have a unique opportunity to be a strong voice in communicating to others that physicians and physicians' spouses care about the health and the quality of life for those the physicians serve, and that we care about those who have limited access to health care.

When we convey that message we are responsive to our purpose and we significantly influence the future of medicine.

Our members are involved in the legislative process. We have become much more sophisticated in our approach to legislative issues that affect the health and well being of everyone.

In this past election year the MSMA Auxiliary placed emphasis on involvement in campaigns. Dr. Gary Dyer asked the Auxiliary to help with voter registration. In Kansas City the St. Joseph auxilians responded and assisted with voter registration in coalition with the League of Women Voters.

In Jasper County, auxiliary members actively campaigned for Dr. Marvin Singleton and helped with his successful bid for a seat in the Missouri Senate.

In Lafayette-Ray Counties one of our members ran for public office and was elected to the city council.

Another of our members serves as mayor in Joplin.

My own county is represented by a fellow auxilian in the Missouri House of Representatives.

Thirteen county auxiliaries were represented at the Day at the State Legislature on March 6. The Auxiliary was represented when the governor signed the Doctors' Day Proclamation on March 13.

Another MSMA Auxilian, Sandra Mitchell, represents us in the AMA Auxiliary as legislative chairman. Mrs. Mitchell was right when in addressing the AMA State Health Legislation Meeting she told the attendees that "Today's Auxilians are more visible, more involved, more professional, more knowledgeable, and thus more capable of making an impact than we were in the past."

Auxilians are especially good at making legislators aware that their constituents are watching and that they care. Significant victories in health legislation accomplished in 1990 with the Auxiliary's help included passage of "anti-hassle" legislation and increased taxes on tobacco and alcohol.

Your efforts and that of your spouses have made a difference. They've made a difference, too, in seeing that physicians get the best training available. Many factors contribute to the high standards of medical care in Missouri and among them is the expertise of physicians like you who provide that care.

To maintain excellence in patient care, physicians must have access to quality medical training. As the cost of medical education continues to increase and sources of funding dwindle, support from the medical community is vital to ensure that future physicians receive the best educational and research opportunities.

The AMA-ERF is dedicated to ensuring that these funds are available to supplement the cost of medical education and training. Over the past 40 years, more than $51 million in gifts has been distributed to medical schools through the Foundation.

A major factor in the success of AMA-ERF has been the involvement of our auxiliary members — or should I say your auxiliary members.

Your auxiliary has promoted AMA-ERF to physicians and families through numerous programs and fundraisers such as the Holiday Sharing Card. In an effort to raise additional funds, this year we are having a Homes Tour on Friday afternoon and a Silent Basket Auction at this convention. Beautiful baskets have been donated by county auxiliaries, MSMA Council members, staff executives, and individual members.

The MSMA Auxiliary has raised nearly $24,000 so far this year for AMA-ERF, and almost $4,500 for MSMF.

And we're not done. In fact, tonight I invite you to join us at 6:30 p.m. for our fundraiser. The Missouri Beef Industry Council is providing us with a complimentary beef dinner and then we will go to the Stage Two Theater in the Crown Center to enjoy an unforgettable evening of entertainment seeing the side-splitting "who-dunit comedy that lets audiences play armchair detective." It's titled "Sheer Madness."

You will find in your delegate handbook an informational flier and a form for your contribution. The theater tickets have been underwritten by donations from individuals and pharmaceutical companies, thereby making your $50-per-ticket donation clear profit for AMA-ERF or MSMF. Tickets are available at the registration area.

Membership has been an important focus for the auxiliary and we need your help. The AMA Auxiliary set a goal or a quota of 1,355 members for Missouri this year. I am sorry to report that we did not reach this goal. We now have 1,146 members. Your membership totals 6,386. Our membership represents only one-sixth or approximately 16% of your membership. We need your help.

I ask that you look on your name badges for a gold sticker that proclaims "AMA Auxiliary - My Spouse is a Member." If you don't have this gold sticker, it's not too late. Go to the MSMA Auxiliary registration desk in the Century Foyer and we will gladly assist you in obtaining the gold sticker and thereby adding another volunteer member to assist the auxiliary in promoting healthy lifestyles across the country and in supporting one another. So please will you help us in recruiting your spouse? We cannot exist without the volunteer efforts of your spouse.

Finally, as I complete this report, I express my sincere appreciation to the members of the MSMA Auxiliary for their loyal support and to the Missouri State Medical Association staff members for their cooperation and assistance. I especially want to thank you for the services of Valerie Peters as our auxiliary liaison to the MSMA. Her assistance and knowledge are invaluable to our organization.

I am deeply grateful for the excellent cooperation and support of your president, Dr. Gary Dyer, and the Council. They have graciously responded to auxiliary requests and have lightened my load.

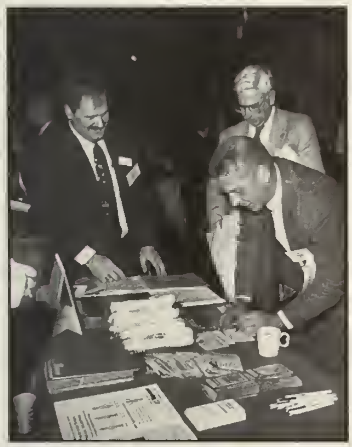
I sincerely thank the Missouri State Medical Association for their strong support and generosity during the year that you have given to me and have given to your respective auxiliaries. We needed someone to stand beside us and you were there. You have a great organization. The auxiliary will always be there to help when needed.

On behalf of the Missouri State Medical Association Auxiliary, I wish you a successful and productive 133rd Annual Meeting. Thank you. ■

Happenings at the 133rd Annual MSMA Convention

MISSOURI STATE MEDICAL ASSOCIATION

The Mayor of Whoopup entertains at the Presidential inauguration ceremonies.



Above right: Jerry Murrell, M.D., Columbia, raises a point during a meeting of Reference Committee B during the Annual Convention. Right: Dorothy D. Reister, M.D., receives roses from outgoing MSMA President Gary Dyer, M.D., during inauguration ceremonies. Left: Arlen Winsky, M.D., Springfield, registers for a prize at one of the exhibits.

MEDICAL ASSOCIATION

Ed Kelsay, an attorney from Oklahoma, speaks at the 1991 General Session.

MSMA Auxiliary members and visiting guests kept busy at the convention. From left: Chris Bohigian, Mary Kay McPhee, AMA President Norma Skoglund, and Sandy Mitchell.

Resolutions of the 133rd MSMA House of Delegates

Resolution 1

MSMA Position on the PRO System

Introduced by the Buchanan County Medical Society

RESOLVED, that the position of the Missouri State Medical Association be that the current national PRO system is unfair to physicians and hospitals, is not based upon established guidelines and is inaccurate in detecting alleged quality failures; and be it further

RESOLVED, that MSMA make its position known to HCFA and the U.S. Congressmen from Missouri; and be it further

RESOLVED, that this resolution be taken to the AMA (Annual Meeting 1991) with the intent of asking AMA for further study of current and forthcoming changes in PRO regulations.

House Action: The above amended substitute resolution was adopted.

Resolution 2

MSMA Position on HCFA Rule that only Physician or Staff may Complete Certificates of Medical Necessity for Medicare Oxygen

Introduced by the Buchanan County Medical Society

RESOLVED, that the position of MSMA shall be that the HCFA rule mandating a Certificate of Medical Necessity for Medicare oxygen be filled out only be physicians or physicians' staff is unnecessary and burdensome; and be it further

RESOLVED, that this resolution be taken to the AMA (Annual Meeting 1991) with the intent of making the MSMA position the AMA position; and be it further

RESOLVED, that MSMA make its position known to HCFA and the U.S. Congressman from Missouri.

House Action: The above substitute resolution was adopted.

Resolution 3

MSMA Position on DRGs

Introduced by the Buchanan County Medical Society

RESOLVED, that the position of the Missouri State Medical Association shall be that the use of Diagnosis Related Groups as a system of reimbursement by Medicare is an inherently unfair and overly complex system and should be abandoned, and be it further

RESOLVED, that MSMA make its position known to HCFA and the U.S. Congressmen from Missouri, and be it further

RESOLVED, that this resolution be taken to AMA (Annual Meeting 1991) with the intent of making the MSMA position the AMA position; and be it further

RESOLVED, that MSMA urge AMA to pursue reasonable legislative efforts to eliminate the use of diagnosis related groups.

House Action: The above resolution was not adopted.

Resolution 4

MSMA Position on Dispensing Medication

Introduced by the Buchanan County Medical Society

RESOLVED, that the position of MSMA be that dispensing is part of the practice of medicine and that physicians always have the right to dispense needed drugs and devices.

House Action: The above substitute resolution was adopted.

Resolution 5

Insurance Carriers' Discriminate Denial of Full Entitled Payments to Allergy Patients

Introduced by the Clay-Platte Medical Society
and Charles J. Siegel, M.D., President,
Missouri State Allergy Association

RESOLVED, that no insurance carrier insuring the health of individuals in the State of Missouri shall discriminate in terms of benefits or financial remuneration for costs incurred in medical care for individuals with asthma or allergic diseases, nor for the specific diagnosis or treatment of such conditions.

House Action:The above resolution was adopted.

Resolution 6

Guidelines for Determining Need for Hospital Based Observation or Admission Status

Introduced by Metropolitan Medical Society of Greater Kansas City

RESOLVED, that the Missouri State Medical Association adopt the following guidelines statement:

Guidelines For Determining Need For Hospital-Based Observation or Admission Status

An Observation Stay is One:

1. Requiring the use of hospital facilities or services
2. Ordinarily requiring approximately 24 hours or less
3. Usually involving a diagnostic test and/or therapeutic endpoint

Notes:

1. If approximately 24 hours is not sufficient to arrive at a decision, further observation or admission status should be determined.
2. If the problems are sufficiently complex to prevent a timely, appropriate decision to dismiss, then admission status is probably indicated.
3. If further and/or more complicated diagnostic and/or therapeutic decisions are required after approximately 24 hours, then admission status is probably indicated.
4. The attending physician must document the indices and endpoints of his plan clearly.
5. Social admissions are not authorized; there must be a legitimate medical reason for any hospital admission; and be it further

RESOLVED, that the Missouri State Medical Association adopt the guidelines outlined above and refer them to the AMA for action.

House Action: The above amended resolution was adopted.

Resolution 7

Direct Admission of Medicare Patients to Long-Term Skilled Nursing Facilities

Introduced by Metropolitan Medical Society of Greater Kansas City

RESOLVED, that the American Medical Association petition the Health Care Financing Administration (HCFA) to provide coverage for direct admission of Medicare patients to a long-term care skilled nursing facility, whether or not they have been discharged from an acute care hospital within the last 30 days.

House Action: The above resolution was adopted.

Resolution 8

Missouri State Medical Association Monetary Contributions to Campaigns of MSMA Members for National American Medical Association Offices

Introduced by the Clay-Platte County Medical Society

RESOLVED, that the MSMA instruct the Council to develop and implement a policy to deal with members soliciting funds for the purpose of campaigning for national AMA office; and be it further

RESOLVED, that the MSMA instruct the Council that this policy should include (but not be limited to):

1. guidelines that indicate the acceptable amount of a campaign donation;
2. guidelines that consider requirements for contributions from other sources;
3. guidelines that govern the number of times the MSMA will contribute to one individual; and be it further

RESOLVED, that the MSMA instruct the Council that this policy must include a requirement that the candidate for national AMA office must submit to the Council an accounting of the money including a detailed expense report; and be it further

RESOLVED, that the MSMA instruct the Council to widely distribute and publicize this policy to the MSMA membership by publishing the policy in *Missouri Medicine*; and be it further

RESOLVED, that the MSMA instruct the Council in the future to publish in *Missouri Medicine* the name of MSMA members and the office they are seeking. This publication should include the amount of any campaign donation; and be it further

RESOLVED, that the MSMA instruct the Council to submit this policy at the next annual meeting for review and final approval by the MSMA House of Delegates.

House Action: The above resolution was adopted.

Resolution 9

Continued Suppport of HR 4475, "Medicare Physician Regulation Relief Amendments of 1990"

Introduced by the St. Louis Metropolitan Medical Society

RESOLVED, that organized medicine continue to support co-sponsorship in the U.S. House of Representatives for HR 4475, "Medicare Physician Regulation Relief Amendments of 1990"; and be it further

RESOLVED, that organized medicine support the addition of HR 4475 to the Budget Reconciliation Act which will be before the House Energy and Commerce Committee; and be it further

RESOLVED, that similar support be given to SB 2591, sponsored by Senator Max Baucus (D-MT).

House Action: The above resolution was not adopted.

Resolution 10

Physician Support for S 2934, the Hatch Bill

Introduced by the St. Louis Metropolitan Medical Society

RESOLVED, that MSMA support SB 489 and HR 1004 which would establish federal incentives and requirements to reform the tort system; and be it further

RESOLVED, that MSMA urge its members to contact their Congressmen and Senators to encourage their support for these bills.

House Action: The above substitute resolution was adopted.

Resolution 11

Regulation of Managed Care

Introduced by Allen S. Palmer, D.O., and the St. Louis Metropolitan Medical Society

RESOLVED, that when patients request a nonparticipating physician to provide care and or services for them, and said physician agrees to do so and accept as compensation-in-full the fee schedule of third party payor, then the third party payor should not financially coerce the patient into abandoning their physician patient relationship and seek a new, unknown physician; and be it further

RESOLVED, that MSMA petition the appropriate Missouri state agency to enact such regulations so as to make this a provision of all managed care programs.

House Action: The above resolution was referred to MSMA Council.

Resolution 12

Improvement and Expansion of Medicaid Services by Ajudication

Introduced by the Jasper County Medical Society

RESOLVED, that the Missouri State Medical Association and other concerned consumer groups institute a class action lawsuit on behalf of recipients to improve access to health care physicians' services by asking for a reasonable payment for such services mandated by federal law; and be it further

RESOLVED, that this resolution be taken to the AMA for action on a national basis to insure adequate access to health care by Medicaid recipients.

House Action: The above resolution was referred to MSMA Council.

Resolution 13

Bicycle Safety Helmets

Introduced by the Young Physicians Committee

RESOLVED, that the MSMA office serve as a central information clearinghouse for bicycle safety helmet resource materials, both for patient education and for running local bicycle helmet campaigns; and be it further

RESOLVED, that the MSMA work with the AMA to develop model local legislation requiring the use of bicycle safety helmets.

House Action: The above resolution was adopted.

Resolution 14

Cardiopulmonary Resuscitation Training for High School Students

Introduced by the Young Physicians Committee

RESOLVED, that the MSMA urge the Missouri State Department of Education and other appropriate organizations to recognize CPR training by certified instructors as a basic skill that should be included in a student's curriculum prior to graduation; and be it further

RESOLVED, that the MSMA urge its members to work with their local school districts to implement CPR training until state policy is set.

House Action: The above amended resolution was adopted.

Resolution 15

Ambiguous Reporting by National Practitioner Data Bank (NPDB)

Introduced by MSMA Hospital Medical Staff Section

RESOLVED, that the MSMA urge the AMA to undertake a comprehensive examination of the reporting practices of the NPDB in an effort to identify areas where important misunderstandings may arise; and be it further

RESOLVED, that the MSMA ask the AMA to use its influence and working relationship with the NPDB to urge appropriate refinements in reporting policies in order to avoid damaging ambiguity and misunderstanding to include, at a minimum, the breakdown of drug violation reporting into several categories, such as:

A. Narcotic substance violations
B. Non-narcotic substance violations
C. Other prescribing violations
D. Diversion of drugs
E. Personal use

House Action: The above resolution was adopted.

Resolution 16

Test for AIDS

Introduced by the St. Louis Metropolitan Medical Society

RESOLVED, that MSMA support the position that physicians should be allowed to perform HIV testing on patients, without mandatory prior consent, when such testing is medically indicated, and when possible, appropriate counseling is provided prior to reporting of test results; and be it further

RESOLVED, that physicians who are at risk of acquiring HIV infection, and who perform invasive procedures, should determine their HIV status.

House Action: The above amended substitute resolution was adopted.

Resolution 17

MSMA Position on the National Practitioner Data Bank

Introduced by the Buchanan County Medical Society

RESOLVED, that the position of the Missouri State Medical Association is that the National Practitioner Data Bank is unnecessary and lacks the safeguards necessary to protect the privacy of ethical physicians; and be it further

RESOLVED, that this position be taken to AMA (Annual Meeting 1991) with the intent of making the MSMA position the AMA position; and be it further

RESOLVED, that MSMA makes it position known to the U.S. Congressmen from Missouri.

House Action: The above amended resolution was adopted.

Resolution 18

MSMA Position on Hunter Education Courses in the State

Introduced by the Buchanan County Medical Society

RESOLVED, that MSMA support the inclusion of firearms safety training in the Missouri education curriculum.

House Action: The above substitute resolution was adopted.

Resolution 19

Medical Ombudsman to Investigate Bureaucratic Incongruities

Introduced by the Buchanan County Medical Society

RESOLVED, that MSMA develop the issue of medical ombudsman and refer to Council for action.

House Action: The above substitute resolution was adopted.

Resolution 20

MSMA Position on the Classification of HIV Infection

Introduced by the Buchanan County Medical Society

RESOLVED, that the Missouri State Medical Association support the classification of HIV infection as both a communicable and a sexually transmittable disease (STD) and the control measures attendant to its classification.

House Action: The above amended resolution was adopted.

Resolution 21

MSMA Position on the Laboratory Rules Proposed by HCFA

Introduced by the Buchanan County Medical Society

RESOLVED, that the position of the Missouri State Medical Association is that the laboratory rules proposed by HCFA are much too restrictive and will force many independent and physician office laboratories to cease operations, will increase the cost of medical care, will decrease the availability of care, and will be ultimately detrimental to the health of patients; and be it further

RESOLVED, that MSMA make its position known to HCFA and the U.S. Congressmen from Missouri.

House Action: The above resolution was not adopted.

Resolution 22

Medicare Program

Introduced by the Buchanan County Medical Society

RESOLVED, that MSMA will investigate Dr. Allcorn's dilemma with the Medicare system, which has denied him the right to privately contract with patients to provide care outside the Medicare system, and that MSMA will forward this information to AMA for action; and be it further

RESOLVED, that the position of MSMA is that physicians who find themselves in the predicament of being forced to accept inadequate Medicare reimbursements such that their livelihoods (and therefore their abilities to care for their patients) are jeopardized should be allowed to exclude themselves from the Medicare program and still privately contract to provide care for Medicare beneficiaries such that the services would be considered non-covered by Medicare; and further that physicians have the right to earn a livelihood and to protect their ability to provide care and to not be forced out of business by a mandated inadequate reimbursement schedule; and be it further

RESOLVED, that this position be taken to AMA (Annual Meeting 1991) with the intent of making the MSMA position the AMA position; and be it further

RESOLVED, that MSMA make its position known to the U.S. Congressmen from Missouri; and be it further

RESOLVED, that AMA be urged to take all actions possible to reverse Public Law 101-239 and to resolve this intolerable situation.

House Action: The above resolution was adopted.

Resolution 23

MSMA Position on the Removal and/or Repair of Non-Oral Facial Lesions by Oral Surgeons

Introduced by the Buchanan County Medical Society

RESOLVED, that the position of the Missouri State Medical Association is that the removal and/or repair of non-oral facial lesions are not examples of the practice of Dentistry, but rather are examples of the practice of Medicine.

House Action: The above amended resolution was adopted.

Resolution 24

Access to Medical Record Information

Introduced by Gordon M. Goldman, M.D., and the St. Louis Metropolitan Medical Society

RESOLVED, that the Missouri State Medical Association request the State of Missouri insurance commissioner to establish guidelines that limit this unnecessarily broad review of medical records information by insurance companies, and further request the commissioner to establish criteria that allow patients denied coverage based on that information an opportunity to appeal an adverse decision to the underwriters; and be it further

RESOLVED, that the Missouri State Medical Association request a careful review and support at the national level for guidelines to limit insurance company review of medical record information.

House Action: The above resolution was adopted.

Resolution 25

Confidential Information Requested by Insurance Companies

Introduced by Gordon M. Goldman, M.D., and the St. Louis Metropolitan Medical Society

RESOLVED, that the Missouri State Medical Association and th e American Medical Association further study the problem of providing insurance companies with the requested information without copying confidential portions of the medical record and to establish criteria that will standardize the reporting of this information throughout the insurance industry.

House Action: The above resolution was adopted.

Resolution 26

Blood Alcohol Level in the State of Missouri

Introduced by the Metropolitan Medical Society of Greater Kansas City

RESOLVED, that the Missouri State Medical Association urge the State Legislature to change the law so that the federally-recommended blood alcohol level of 0.08 grams per deciliter shall be considered "driving under the influence" in Missouri; and be it further

RESOLVED, that the MSMA support strong enforcement of Missouri Statutes dealing with the critical problem of driving under the influence of alcohol and supports developing a system that better facilitates prosecution of the offenders.

House Action: The above amended resolution was adopted.

Resolution 27

Inappropriate Use of Drug Enforcement Administration (DEA) Numbers and Inappropriate Use of Professional Relations in Market Research

Introduced by the Metropolitan Medical Society of Greater Kansas City

RESOLVED, the unauthorized release of DEA numbers by pharmacists and other third parties is unprofessional, a violation of a physician's confidentiality, and has the potential of facilitating access to controlled substances by unauthorized individuals; and be it further

RESOLVED, that the MSMA urge the American Medical Association to work with the DEA and other appropriate federal agencies and insurance carriers to prohibit the use of DEA numbers for purposes other than for which they were originaly issued, i.e., the prevention of fraud and abuse of controlled substances; and be it further

RESOLVED, that the MSMA urge the AMA to make physicians aware of the peril of having suppliers, insurance companies, and prescription card companies monitoring individual practice patterns and using that information for competing purposes, and applying a business advantage in competition and contract negotiations; and that the AMA approach any company thought to be gathering intelligence on individual physicians, without an acknowledgement to the physician, and express concerns over issues of confidentiality and misuse and abuse of professional relationships.

House Action: The above resolution was adopted.

Resolution 28

Banning the Sale of Fireworks

Introduced by the Missouri Chapter, American College of Emergency Physicians

RESOLVED, that MSMA support legislation to prohibit the sale of Class C fireworks in the State of Missouri.

House Action: The above resolution was adopted.

Resolution 29

Disability Insurance for Resident Physicians

Introduced by the MSMA Resident Physician Section

RESOLVED, the MSMA join the AMA in encouraging training institutions and hospitals to work to make available affordable, adequate disability insurance to resident physicians; and be it further

RESOLVED, the MSMA strongly encourages Missouri's training institutions and hospitals to widen the availability of disability insurance coverage for resident physicians; and be it further

RESOLVED, the MSMA shall meet with representatives of the insurance industry to explore the feasibility of offering — for an appropriate premium — supplemental disability insurance for resident physicians who wish to purchase additional coverage.

House Action: The above amended resolution was adopted.

Resolution 30

Establishment of a Risk Management Program

Introduced by the MSMA Council

RESOLVED, that the MSMA authorizes the Professional Liability and Tort Reform Blue Ribbon Committee to design and establish a Risk Management Program for the members of the Missouri State Medical Association. This Program should be presented to the MSMA Council at its August meeting. The Program will be implemented upon approval of the Council; and be it further

RESOLVED, that at the same time, this Committee also develop a tort reform legislative package to be presented to the Legislature at the appropriate time.

House Action: The above resolution was adopted.

■

MSMA Patient Brochures Offer Information

MSMA has available several patient information brochures. Topics range from breast cancer treatment alternatives to health care cost containment. You may preview sample copies free of charge before ordering. Submit orders and sample requests, by title, on your professional letterhead, to **MSMA Brochures**, P.O. Box 1028, Jefferson City, MO 65102. Or, you may fax your orders to the MSMA office at 314/636-8552. Here are just a few of the titles:

A WOMAN'S CHOICE. Presents various breast cancer treatment alternatives in clear layman's language, discussing advantages and disadvantages of each treatment choice. *Cost: 15 cents each.*

HEALTH CARE COST CONTAINMENT. Do your patients understand why health care costs are rising? Do they realize they can do something about it? In simple language, this popular brochure explains some of the reasons for spiraling costs and shows how the patient and physician working together can help contain them. *Cost: 10 cents each.*

PATIENT SURVEY. These small brochures are designed to elicit your patients' honest opinion about your practice. The answers to the quick survey can provide you and your staff with valuable feedback regarding the operation of your practice. Consider enclosing them with patient bills. *Cost: 10 cents each.*

MAKING PLANS. This brochure is designed to make health insurance, HMOs, PPOs and IPAs more understandable to your patients. It describes, in general terms, how each plan works so your patients can make their own best choices. *Cost: 10 cents each.*

UNDERSTANDING MEDICARE. This is a new brochure that explains some of the complexities of the Medicare maze: qualifying, submitting claims, understanding terminology. The information is general and simple, so your Medicare patients and family can benefit. *Cost: 10 cents each.*

Committee and Commission Reports

Committee on Publications

The 87th volume of *Missouri Medicine* contained 27 scientific articles, seven special articles, 10 guest editorials, one feature article, 12 Chronic Disease Reports, six AIDS series articles, and four listings of the Final Disciplinary Actions of the Board of Healing Arts. Twelve issues were produced, including the Annual Directory issue in August. Each issue had an average circulation of 6490.

Throughout 1990, *Missouri Medicine* continued to feature original artwork created or owned by six Missouri physicians and MSMA members. Missouri artists' works appeared on the remaining six covers. The August Directory issue featured a commissioned painting of the Rose Garden at St. Louis Botanical Gardens painted by John Odell of St. Louis. Mr. Odell also created a painting of the Tulip Beds at St. Louis Botanical Gardens for the 1989 Anual Directory. The 1990 painting was the second consecutive year for Mr. Odell to specifically create a work for MSMA. Quite possibly, a tradition may have begun. MSMA Headquarters displays both of Mr. Odell's paintings. *Missouri Medicine* covers continue to be a source of pride for the publication committee.

The special articles featured in 1990 covered the topics of viral transmissions by blood products, elimination of tuberculosis in the United States, Missouri tort reform, indoor air quality and environmental tobacco smoke, Missouri's MATEC program, communication within the MSMA, and a history of the Missouri Brown Spider, along with a recollection of Dr. Joseph Flynn. A feature article focused on Nancy Cruzan.

The Chronic Disease Reports began in January 1990 and ended in December 1990. The reports covered topics such as lung cancer and breast cancer in Missouri, cancer control, arthritis in Missouri, cardiovascular disease in Missouri, racial differences in cancer mortality, the efforts in primary-care practice to control tobacco use, smokeless tobacco use among Missouri youth, and the health and economic costs of smoking in Missouri. These articles were quoted in different media across the state. It was good to see *Missouri Medicine* quoted elsewhere. The AIDS series, which began in September 1989, ended in June 1990.

Missouri Medicine also began a new feature, monthly Patient Information Pages, in 1990. This page is designed for physicians to tear out, copy and distribute to patients.

For the first time, all physician information in the Annual Directory issue was typeset to create an easier-to-read directory. The changes were superb and the difference in readability was obvious. We will continue to produce the directory in this manner.

1990 marked the first full year for Valerie A. Peters as Managing Editor of the journal. She came to MSMA and *Missouri Medicine* in 1987 as an editorial assistant before moving to Managing Editor in 1990.

The editors wish to express appreciation to all who submitted scientific manuscripts and to those who contributed editorials, special articles and others. The complete financial report for the 1990 journal is included in the financial statement of the MSMA. The report is included in the Delegate's Handbook.

Donald G. Sessions, M.D., *Chairman*
Ramona Chapman
Jack J. Curtis
John J. Daniels
Stephen Hamburger

Ad Hoc Committee on Sunsetting

The Ad Hoc Committee on Sunsetting met via conference call January 24, 1991. The Committee recommended the deletion of these policies:

Insurance, Coverage for Catastrophic Illness: The MSMA supports the plan for providing catastrophic health insurance as outlined in the AMA Report MM, Annual Meeting 1986. (1987)

Insurance, Chemotherapeutic Costs: The MSMA should sponsor appropriate legislation that would make mandatory the offering of insurance coverage for reimbursement of chemotherapeutic costs, particularly when the therapy is administered on an outpatient basis. (1977)

Insurance, Terminology: The MSMA encourages local insurance carriers to be careful about using literature containing the wording "usual, customary and reasonable" when describing insurance benefits paid. This leads some patients to believe physicians' charges are "unreasonable." The MSMA also encourages physicians to include in their patient information materials an explanation as to why the amount billed may sometimes be more than the insurance benefit paid. (1982)

Dioxin: The MSMA supports an active campaign to bring accurate information on dioxin before the public to prevent irrational reaction and possible unjustified public fright and to prevent dissemination of possible erroneous information until such time as epidemiological studies have been completed. (1983) (This is the first part of the published policy on dioxin. The committee recommends the second part, which follows, be left intact.)

The MSMA supports continuing monitoring of dioxin research, recognizing that to date no serious human disease has been conclusively linked to exposure to the chemical. The findings of the AMA Council on Scientific Affairs Panel on Toxic Substances are supported by the MSMA. (1985)

The Committee also made the following recommendations. The first concerned the policy on chiropractice:

Chiropractic: The MSMA is unaware of any scientific evidence that proves that spinal manipulation and adjustment are appropriate treatments for such health conditions as hypertension, heart disease, stroke, cancer, diabetes, and infection. Therefore, the MSMA will continue to warn the public of the health hazards of entrusting the treatment of such conditions to practitioners who maintain that all disease is caused by the misalignment of the spine.

A physician may refer a patient for diagnostic or therapeutic services to another physician, licensed limited practitioner, or any other licensed provider of health care services whenever the physician feels that these services will benefit the patient. As is the case with physician referrals, limited practitioner referrals should be based on the practitioner's individual competence and ability to perform service to the patient. (1981)

The Committee's recommendation, which was accepted by the Council, was to retain the first sentence in this policy statement, deleting the remainder of the first paragraph. The second paragraph will be separated and published under the heading "Referrals."

Also coming under question was a policy on the ordering of diagnostic tests.

Diagnostic Tests, Ordering of: With the exception of not-for-profit health fairs and mammography screenings, the MSMA is opposed to, and considers unethical, the practice of ordering laboratory studies and other diagnostic tests without evidence or indication obtained by a physician in a history and physical examination. (1989)

Discussion of this policy and its intent revealed that the committee's general feeling was the policy should be rewritten to clarify exactly the type of testing to which the Association is opposed. The committee was reluctant to make a statement barring any screening tests, as it could be construed to include legitimate screening done by a physician.

The Committee also discussed MSMA's longstanding policy in support of the wearing of motorcycle helmets, which follows:

Motorcycle Head Gear: The MSMA urges all motorcyclists to wear protective head gear (helmets) to prevent death and disability. (1977)

Besides expressing their support for the statement, several of the committee believed the statement should be rewritten and expanded to include headgear for bicyclists, ATV riders, and others.

The Committee also suggested that two policies, dealing with health care surrogates and the right to forgo life support, be combined or at least placed together in the listing.

Daniel O'Sullivan, *Chairman*
David W. Hall
Donald Cole
Fred Peterson
Fred Hahn

Commission on Interspecialty Medicine

The Commission on Interspecialty Medicine met on November 29, 1990 via phone conference.

The Commission considered Resolution #40, Mandatory HIV Testing and recommended that MSMA support Resolution #40 as written and also support the identification of at-risk individuals for the protection of health care workers and patients.

The Commission recommended the following policy statement on laser surgery:

The Missouri State Medical Association (MSMA) is concerned that the quality of care of patients undergoing laser surgery be safeguarded in the same tradition as patients undergoing other types of surgery. The MSMA strongly supports federal and state regulatory agencies' historic position that laser surgery for medical purposes should be performed by a physician licensed by the State Board of Registration for the Healing Arts.

In order for the MSMA to provide Category I continuing medical education (CME) credit for the scientific portion of the MSMA Annual Convention, the specialty program chairmen are required to provide information regarding the needs and objectives of their program. The objectives will be included on the evaluation forms that each participant must complete to receive Category I credit.

Physicians attending the 133rd MSMA Annual Convention must complete and return the program evaluation forms to the moderator immediately following the scientific program to obtain certificate of attendance.

David Clark, Dermatology, *Chairman*
Rand E. Dankner, *Allergy*
Robert N. Miller, *Anesthesiology*
Dean A. Nierling, *Emergency Physicians*
Ray Lyle, *Family Physicians*
Douglas Westhoff, *Internal Medicine*
William Crowley, *Neurology*
H. Dennis Mollman, *Neurosurgery*
William Walker, *Obstetrics-Gynecology*
Stephen G. Slocum, *Ophthalmology*
John G. Yost, *Orthopedics*
J. Regan Thomas, *Otolaryngology*
David Simon, *Pediatrics*
Aly M. Mohsen, *Physical Medicine and Rehabilitation*
Gordon L. Johnson, *Pathology*
Joey Jamena, *Psychiatry*
Richard A. Heimburger, *Plastic and Reconstructive Surgery*
Julian N. Verde, *Radiology*
Michael J. Bukstein, *Surgery* (MSSS and ACS)
Robert Bruce, *Thoracic*
Michael J. Chehval, *Urology*
Duane Hellam, *Councilor Advisor*

Committee on Constitution and Bylaws

There were no new matters to come before this committee in 1990-1991. Therefore, the Committee did not meet.

However, there is a laid-over amendment to the Constitution that must be voted upon by the 1991 House of Delegates. The amendment completes a change of name and expansion of duties for the former MSMA Judicial Council. The amendment was voted upon affirmatively by the 1990 House. A second affirmative vote by this House gives it formal adoption. (Bracketed material to be deleted; underlined material to be added.)

Article VI. [Judicial Council] Council on Ethics and Judicial Affairs

The [Judicial Council] Council on Ethics and Judicial Affairs shall be the judicial body of the Association. It shall consist of five active members nominated by the President and elected by the House of Delegates.

The companion amendment to the Bylaws was passed by the 1990 House. No further vote is needed to adopt the Bylaws change.

H. Brian Balfour, *Chairman*
Mary K. McCaffree
Paul B. Anderson
Douglas B. Bogart
E. Richard Graviss

Commission on Medical-Legal Affairs

The MSMA Commission on Medical-Legal Affairs met via a telephone conference call on January 25, 1991.

The Commission received one resolution as referred from the 1990 Annual Convention:

(A) **Resolution #46 — "Assistance to the Board of Healing Arts by the Local Medical Society."**

Recommendation: The Commission recommended to Council that Resolution #46 be not adopted. The Commission determined that the Board of Healing Arts supported the resolution and that MSMA action was not necessary.

The Commission also considered **Senate Bill 99.**

Recommendation: The Commission recommended to Council that the MSMA should oppose passage of SB 99 which would place a cap on the fees physicians could charge for providing copies of medical records.

Joseph A. Corrado, *Chairman*
Michael D. DePriest
Thomas C. Sparkman
Michael J. Porter
Grant A. Bever
Chris K. Fotopolous
Mario Coronado
Nancy Abdon
Richard J. Gimpelson
Ralph Braunschweig
Michael K. Blank
Edward F. Schlafly, Jr.
Paul Quinn
Edmond B. Cabbabe
Robert T. Gibbons, *Council Advisor*

Commission on Continuing Medical Education and Health Manpower

The Commission on Continuing Medical Education and Health Manpower met on August 24 and December 12, 1990.

During 1990 the Commission approved the following institutions and organizations as a sponsor for Continuing Medical Education: Boone Hospital Center, *Columbia;* Cape Girardeau County Area Medical Society, *Cape Girardeau;* Cole County Medical Society, *Jefferson City;* Columbia Regional Hospital, *Columbia;* Deaconess Hospital, *St. Louis;* DePaul Hospital, *St. Louis;* Freeman Hospital, *Joplin;* Lake of the Ozarks Medical Society, *Lake Ozark;* Medical Center of Independence, *Independence;* Regional Medical Center of Independence, *Independence;* St. John's Regional Medical Center, *Joplin;* and Veterans Administration Medical Center, *Kansas City.*

The Commission members also reviewed Interim Reports for two county medical societies and 11 hospitals. In the future, the Commission will meet on a quarterly basis to be more responsive to Missouri hospitals and organizations.

In August, the Commission met with Accreditation Council on Continuing Medical Education Committee for review and recognition. This Committee reviewed the ongoing activities of the Missouri State Medical Association in order to extend the accreditation period as an accrediting agency for intrastate hospitals and organizations.

The Commission approved protocol to assure that hospitals and organizations recognized as providers for continuing medical education renew their accreditation in a timely manner. Failure to comply with the protocol may jeopardize the accreditation status.

The Commission will continue to use *Missouri Medicine* to publicize Category I continuing medical education activities. Interested institutions and organizations desiring to be recognized as a sponsor for Category I CME are encouraged to contact the MSMA office to obtain additional information.

John H. Renner, *Chairman*
Michael W. Vannier
Gerald L. Duling
Turner L. Minnigerode
George X. Trimble
David S. Martin
James S. Denninghoff
Gerald Hart

Michael R. Freeman
York E. Silliman
Robert B. Brigden
Nancy H. Ceaser
William D. Bradshaw
Harry Miller
Purificacion Florendo

Missouri Physicians Health Committee

The Missouri Physicians Health (MPH) Committee met on May 12, June 26 (conference call), September 22, 1990 and January 19, 1991. In addition to these meetings, Committee members have been responding to requests for program information and disseminating educational materials to administrators and medical staffs of Missouri hospitals.

The Committee expressed its appreciation to the MSMA members, hospital administrations, hospital medical staffs and insurance companies that have contributed funds in support of the Physicians Health Program. The Committee reviewed letters to Missouri liability carriers and Missouri hospitals seeking continued funding.

The terms of Committee members' appointment were reviewed and it was noted that four of the Committee members terms of appointment will expire in 1991. All four of the Committee members whose terms will expire expressed a desire to be reappointed.

The MPH Program provides assistance to the medical schools in Missouri in order to establish assistance programs for impaired students and house staff. In light of this fact, the addition of a medical student and resident to the MPH Committee would be beneficial to Committee activities.

Recommendation: That MSMA appoint one medical student and one resident as ex officio member of the MPH Committee.

The MPH staff developed a policy and procedure manual to serve as a guide for Missouri hospitals and medical staffs in the formation of their impaired physician committees. The Committee recommended several minor additions in order to make the manual more compatible with existing hospital bylaws and the Committee approved the draft with the suggested revisions.

The Physicians Health Policy and Procedure Manual on physician impairment has been forwarded to all hospitals contributing to the MPH Program. It is anticipated that this will enhance relationships with Missouri hospitals.

It was the consensus of the Committee that all participants should be billed a $50.00 per month administrative fee. MPH participants who have maintained their sobriety for a period of five years or more will not be billed for services provided thereafter.

The Committee adopted a protocol for collection of fees and the following policy for handling delinquent accounts:

"The MPH Committee has the option of deciding that if a participant is unable to pay the fees the debt may be written off or placed on time payments. Documentation of inability to pay must be provided to the MPH program before this last option could occur. Such documentation will be obtained by the MPH staff in the form of a credit report and other relevant information."

All participants with delinquent accounts 30 days or more will receive a letter stating that the amount is due and payable.

The Committee discussed the delinquent bills for urine drug screens. MPH staff indicated that two attempts have been made to collect charges for these urine screens. Several participants were told by previous MPH staff that a decision had been made to write off these charges.

Recommendation: That MSMA write off charges for 12 participants totalling $3,875.

The Committee also considered a proposal to reduce participant fees for medical students and house officers:

Recommendation: The administrative fees will be reduced to $25.00 per month for medical students determined to be a hardship case. Determination will be made on an individual basis.

The MPH staff forwarded a letter to all presidents of medical staffs and hospital administrations to inform them that physician impairment programs currently are not obligated to report to the National Practitioner Data Bank. This letter encouraged early referral to the MPH program before the impairment becomes significant enough to warrent disciplinary action by hospitals which will be reportable.

It was the consensus of the Committee that evaluations could be performed by individual Committee members, but that it is a conflict of interest for there to be long term treating arrangement between participants and members of the MPH Committee.

Throughout the year, MPH staff discussed individual cases so that the committee could have input into difficult clinical matters.

MPH staff received several requests for assistance from health professionals belonging to other associations. In response to these requests, a meeting with interested associations would be appropriate to determine mutual interests.

Recommendation: That MPH staff direct a letter to the following associations to determine interest in sharing resources: Missouri Dental Association; Missouri Nurses Association; Missouri Association of Osteopathic Physicians and Surgeons; and Missouri Pharmaceutical Association.

The Committee was informed that the Articles of Incorporation for the MSMA Physicians Health Foundation have been filed with the Missouri Secretary of State. The application for the Foundation to be recognized for exemption from Federal Income Tax under Section 501 (C) 3 has been submitted to the Internal Revenue Service. The accounting principles and required documentation were reviewed to assure compliance with applicable IRS regulations.

The MPH Program will provide an intervention training session during the 133rd Annual Convention. The MPH Committee, with approval of the MSMA Council, would like to present a program on physician impairment during the 1992 Annual Convention.

1990 Year End Report

Total Referrals – 1990	39
New Referrals – September-December 1990	17 (2 referred to Osteopath Program)
#MPH participants 7/31/90	52
#MPH participants 12/3/90	50

5 physicians left the state during this quarter and were referred to their respective state programs.

1 physician made a decision to leave medicine and withdrew from the MPH Program.

MSMA members	41

Letters have been mailed to those participants who are not members.

PARTICIPANTS:	
M.D.'s	45
D.O.'s	5

SPECIALTIES:	
Pediatrics	2
ER Medicine	6
Ophthalmology	3
Radiology	3
Internal Medicine	13
Pathology	1
Anesthesiology	2
Cardiology	1
Family Practice	6
Neurosurgery	1
Surgery	1
Psychiatry	4
OB-GYN	2
Orthopedics	3

AREAS OF STATE:	
St. Louis	14
Kansas City	13
Springfield	4
Cape/Sikeston	4
Joplin	2
Rolla	1
Nevada	1
Poplar Bluff	4
Cameron	1
Kirksville	1

St. Joseph	1
Columbia	1
Out of State	1

James M. Criscione
Edward C. Felker, III
K.P.S. Kamtah
Diana J. Spade
Thomas M. Ahmann
Thomas R. Anderson
Donald McIntosh
Hugh C. Bartlett
Edward M. Grimm
Jo-Ellyn M. Ryall
Jack L. Croughan, *Medical Director*
Karen Sanders, *Program Coordinator*
Carl Pearman, *Chairman*

Commission on Public Affairs

The MSMA Commission on Public Affairs met January 30, 1991, via conference call.

Four resolutions from the 1990 House of Delegates were referred to the Commission for its recommendations. The Commission made the following recommendations, which were accepted by the Council.

Resolution No. 23 (A-90) Misinformation - Medical Care Cost and Cost Increase. The Commission agreed that it was desirable to cover the entire state with publicity about the reasonableness of today's health care costs in light of inflation, increases in population, and intensity of services, but suggested that such publicity was better handled on the local level. It recommended that information about medical care costs be distributed to the local component medical societies. The local societies could seek publication or publicity as appropriate.

Resolution No. 26 (A-90) Physician and Spouse Voter Registration. The Commission noted voter registration is always a worthy goal and recommended that physician and spouse voter registration efforts be continued at the state and local levels. Promotion should be accomplished via the component medical societies and the county and state medical auxiliaries.

Resolution No. 29 (A-90) MSMA Position on Recycling. Several members of the commission expressed their concern that more specifics are needed, beyond a simple "we support" policy statement. At the same time, members were reluctant to draw up a set of guidelines for recycling. All supported the concept, saying recycling is important for the public health. The Commission recommended the MSMA endorse legislative activity that would support recycling efforts.

Resolution No. 36 (A-90) Task Force on Drunken Driving. The MSMA has a long history of cooperating with outside agencies in attempting to prevent drunken driving. The AMA adopted a Missouri resolution based on this one, endorsing the concept of local task forces to combat drunken driving. The Commission recommended continued support.

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Marla J. Tobin
Ravi Mehra, Jr.
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Keith A. LaFerriere
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Jo-Ellyn M. Ryall
Joe E. Belew
Carl Doerhoff
Warren C. Lovinger, Jr.
Ruth Kauffman, *Councilor Advisor*

Committee on Legislative Affairs

Almost 1400 bills have been introduced into the 1991 Missouri General Assembly, and the MSMA has tagged 235 that would impact on medicine to varying degrees. Some of the bills are opposed, some supported, some amended, and some monitored to insure that objectionable language is not added onto the original bill.

Of all the issues facing the Missouri General Assembly, none holds more attention than health care. And of the myriad health care issues pending before lawmakers, none seems more urgent than the spiraling cost of health care services.

The Missouri Chamber of Commerce recently polled its membership and found that health care cost containment was far and away the most important issue facing business. Labor unions, school districts, insurers, and many other groups are beginning to focus their energies on health care issues, and a vast array of remedial proposals are being forwarded. Among these are a variety of statewide health care plans, which follow:

HB 55 would require the state to prepare a report on Missouri's health care delivery system;

HB 56 would create a non-profit "Health Purchasing Group" to select insurance companies to provide health insurance benefits at the lowest cost to employees;

HB 446 would establish a tax credit for most employers who provide health benefits to employees; and

HB 28 would overhaul Missouri's health care system completely, changing it to a Canadian-style health care state.

While few observers expect any of these dramatic measures to pass into law this year, they have focused tremendous attention on the plight of the uninsured, the underinsured, and on the issue of health care cost containment. Ultimately, there will be significant changes in Missouri's health care delivery system and if the medical community is to have a voice in the decision-making process, it must be an active, willing participant at every step along the way.

MSMA Supports Utilization Review and Several Other Key Issues.

Fairness for patients and physicians is the aim of two issues being proposed in the Missouri General Assembly at the request of the Missouri State Medical Association.

Senate Bill 196 and **House Bill 430** would place Utilization Review Agencies under state regulations for the first time. Currently, the state has no authority to insure that these agencies, which can deny payment for treatment ordered by physicians, are staffed by qualified personnel and operate with proper medical supervision. The more than 200 U.R. agencies providing services to Missouri insurers could, for example, employ only medical technicians to review claims submitted by physicians.

Under **SB 196** and **HB 430**, U.R. agencies would have to register with the state Division of Insurance and outline the qualifications of their review personnel and provide a description of their standards. Also, the bills state that only a review physician could make a final claims denial and the patient or treating physician could appeal that denial to another review physician who is of the same specialty as the treating physician. MSMA strongly supports these bills.

Quality assurance and patient information are among the features in **HB 247**, which would change Missouri statutes regarding Health Maintenance Organizations (HMOs). The bill, supported by MSMA, would require HMOs to establish utilization review mechanisms, an appeal process for patients and mandate that HMOs inform patients of any limitations to access to providers under the plan. The bill is a compromise version worked out by medicine, the business and labor communities, insurers and HMOs. The bill would also give the state overview of currently unregulated Preferred Provider Organizations (PPOs).

The MSMA supports several other bills. These include:

•Health Care Surrogate/Durable Power of Attorney. **SB 27** and **HB 101** would permit individuals to name a "surrogate" to make health care decisions in case the individual became medically incapacitated. **SB 148** and **HB 100** would expand the state's durable power of attorney statutes to include health care decisions. Both issues are in response to the Cruzan Case and the bills face strong opposition from the Right-To-Life groups.

•Clean Indoor Air Act. HB 105 and **SB 5** would prohibit smoking in certain public places and require proprietors to designate non-smoking areas in places of business.

•AIDS Testing. SB 60 would remove the current requirement for pre-test counseling of patients suspected of HIV infection. It would permit physicians to test for HIV in the same manner as they test for other diseases.

•Health Access Incentive Fund. HB 216 would establish a state-funded program to create financial incentives for physicians to locate in medically underserved areas of the state. These incentives could include loan repayments, start up grants, provide locum tenens, practice subsidies, etc. MSMA supports **HB 216** while opposing **HB 317**, which would provide similar incentives but would be funded by an increase in physicians' annual registration fees.

•Child Death Review Teams. SB 300 and **HB 185** would establish child death review teams to investigate any suspicious death of a child under 15 years old. The county coroner or medical examiner is responsible for reporting such deaths to the review team.

•Local Care for Indigents. SB 303 and **HB 354** would allow cities and counties to establish a voter-approved health care district. The district could assess an earnings tax to provide access to health care for the uninsured indigent.

•Tanning Facility Regulation. SB 74 and **HB 473** would require tanning facilities to register with the Department of Health, post signs indicating the dangers of tanning, require the use of eye protectors and place limitations on the use of such facilities by minors.

•Driving While Drinking. SB 125 would strengthen the state's DWI laws by making municipal convictions equal to state convictions, lower the blood alcohol content from .10 to .08 for DWI conviction and outlaw having open containers of alcohol in a vehicle.

•Seatbelts in Pickups. SB 81 would require the use of seatbelts in pickup trucks in the same manner as currently required for automobiles.

MSMA Opposes Several Measures.

House Bill 28, "Universal Health Care Plan." This bill would establish in Missouri a socialized insurance program, patterned after the Canadian system to provide free health care for all Missourians. This proposal would put physicians on a "negotiated" fee schedule and grant the state authority to determine when, where, and how health care resources would be delivered. Estimates as to costs of implementation of **HB 28** range from $4 billion to $13 billion, and much of that is expected to be generated by a 7.5% gross wages tax on employees — this to be assessed on *all* employees.

The MSMA testified that 87% of Missourians are currently insured and have access to some of the finest health care in the world. While the U.S. system has some flaws, those shortcomings do not warrant a complete overhaul.

House Bill 32, "Missouri Health Care System." This bill would guarantee basic health care for all Missourians, mostly through the existing Medicaid program. The plan would be financed with a 1% sales tax for all households, and an additional $30 per month premium for all households earning more than $6,000 per year. **HB 32** would cap coverage at $500 per year per household for physician services, $500 per year per household for surgeries, $1,000 per year per household for outpatient care, $2,000 per year per household for hospital care, $200 per year per household for laboratory services and $300 per year per household for mental health services. It also establishes a $20,000 lifetime cap for all services for each individual.

Senate Bill 99, "Record Fees." This bill would limit the fees physicians could charge for copies of medical records to $6.00 per search and 25 cents per page. The bill would also require physicans to report on the record copy the charges for services rendered, and would repeal the current law granting physicians authority to withhold or delete any information (e.g. drug or alcohol abuse, mental or emotional illness, etc...) that might be injurious to the patient or is completely unrelated to the request for records.

The Senate Public Health Committee heard testimony on **SB 99** on January 28, and has taken no further action. The MSMA testified that current law requires fees for copies of medical records be "reasonable." An interprofessional grievance mechanism exists between the medical community and the Bar Association, and it has been effective in addressing abuses. It is unnecessary business for the General Assembly.

House Bill 274, "Psychologists Admitting Privileges." This bill would grant licensed psychologists the authority to directly admit and treat patients in any hospital, nursing home, or rehabilitation clinic without the prescription or supervision of a licensed physician. If a licensed psychologist is denied these privileges he or she may bring civil action against the discriminatory person or persons.

The House Public Health Committee heard testimony on this measure on February 2. The bill is pending.

House Bill 538, "Physical Therapist Independent Practice." This bill would grant licensed physical therapists authority to practice physical therapy without the prescription or direct supervision of a physician. The PTs have attempted, without success, to have this measure passed for several years. The MSMA has opposed them vigorously.

On February 13, the House Committee on Economic Development and Licensing heard testimony on **HB 538**. MSMA testified in opposition, pointing out that it is unaware of any physical therapist adequately trained to diagnose. On February 20, the committee approved a watered-down version that would allow PTs to conduct certain screening procedures (e.g. for scoliosis in school children) and develop certain fitness or posture-improvement programs as an employee of athletic teams, schools or athletic clubs).

House Bill 684, "Lay Midwives." This bill would legalize the practice of lay midwifery in Missouri. Not only would this bill let an individual practice midwifery without the supervision of a physician, it requires absolutely no educational or experience qualifications for certification as a midwife. Any person who "is regularly engaged in attending women in childbirth for compensation" could register for certification by the state's Division of Professional Registration.

The House Committee on Consumer Protection reported this measure "Do Pass" on March 13.

House Bill 579, "Generic Substitutions." This bill would require a physician to write in his or her own hand, the phrase "Brand Medication Necessary" across the face of a prescription form if that physician does not want the pharmacist to make a generic substitution. Despite current laws which require a physician to sign on one of two lines on the prescription form to indicate whether or not a generic substitution is acceptable, the pharmacy industry contends that physicians habitually ignore generic equivalents when prescribing for patients.

This bill has been referred to the House Public Health Committee which has not heard testimony yet.

House Bill 318, "Physician Recruiting Incentives." This bill would levy an additional $25 charge for a physician's license that would be used to provide matching funds to provide incentives for physicians to practice in areas with a shortage of physicians. These funds would have to be matched by a 25% contribution from local jurisdictions. The Department of Health would be empowered to oversee implementation of this measure, and it would encompass the existing student loan forgiveness program.

This bill has been referred to the House Public Health Committee, but no testimony has been heard. Although fully supportive of attempts to alleviate the severe shortage of health care manpower in certain areas of the state, the MSMA believes it is a societal problem, to be borne by society, and not a responsibility of the medical community.

House Bill 388/Senate Bill 314 and SCS 238, "Section 383 Insurance Pools." This bill would require professional malpractice insurance pools (Section 383s) to meet many of the regulations applicable to property and casualty insurers, including requirements regarding reinsurance, policyholder surplus, annual reporting, and laws relating to premium increases. Malpractice pools established pursuant to Section 383 RSMo, including physician-sponsored companies are serving their policyholders well and would be unduly injured by further regulation.

SCS 238 has received first round approval in the Senate. MSMA opposed the section in **SCS 238** affecting chapter 383 companies.

Other Issues Pending.

•**Mammography. House Bill 144** sets up a system of registration for the manufacturer, possession and use of mammography equipment and the radioactive materials in them. The equipment must meet criteria regarding its suitability and usage and must be operated by either a physician or a person who meets training standards set by the Department of Health. (*Monitoring*)

•**Definition of Medicine. SB 176** and **HB 124** propose a "definition of medicine" in the statutes as ". . . the evaluation and diagnosis of human disease and conditions for the purpose of initiating treatment and/or prevention of disease. The practice of medicine includes the treatment of human disease including but not limited to the use of surgery and/or the prescribing and dispensing of medicine. Nothing in this section shall prohibit any person licensed under the laws of this state from performing the services which they are authorized to perform under the conditions of their licensure." MSMA attempted to pass a much more extensive "definition" last year that included expert witnesses and review physicians but was defeated by a coalition composed of business, labor, allied health personnel, state and local health departments, insurers and attorneys who saw the definition as a threat to efforts to control health care costs and limit what other professions can do in practice. These same groups have gained amendments this session that result in the definition above, and MSMA is reviewing to see if this definition actually restricts the practice of medicine.

•**Open Formulary. HB 337** provides that when a pharmaceutical firm signs a financial agreement with the state as required by the federal government, the state cannot require prior authorization for a drug on the Medicaid formulary. (*Monitor*)

•**Drivers' Licenses. HB 291** would require physicians to report the names of patients who have a disease characterized by lapses of consciousness so the state could determine eligibility of the person to obtain a drivers' license. The bill does not contain any liability or confidentiality safeguards for physicians or patients. (*Oppose*)

•**Radiologic Technicians. HB 285** would establish a license procedure for five classifications of individuals who use ionizing radiation and organize a Board of Ionizing Radiation Technology to oversee them. (*Oppose*)

•**Fireworks. SB 9** would prohibit the sale of fireworks to individuals under the age of 14. (*Support*)

•**Drug Utilization Review. HB 141** would establish a "Drug Utilization Review Committee" to review drug usage and prescribing practices in the Medicaid program and publish educational materials for providers. (*Support*)

Late Arrivals.

Senate Bill 419, introduced on February 26, 1990, would prohibit a physician from performing more than three major operations within one 8-hour period, unless required to do so due to an emergency. The Board of Healing Arts would be empowered to define "major operations."

House Bill 785, introduced on February 27, 1990, would give the Board of Healing Arts authority to discipline physicians for "upcoding," "exploding" or "unbundling insurance claims, and would prohibit a physician from owning or having a diagnostic or testing laboratory or an ambulatory surgical facility. This bill was introduced at the behest of the Missouri Chamber of Commerce.

■

MONETAMED PROFILE

THOMAS P. DOYLE, M.D.

HOME: Springfield, Missouri.

AGE: 36.

SPECIALTY: Orthopedic Surgery.

MEDICAL COLLEGE: University of Missouri, 1978

PRACTICE: "I recently purchased an established but declining sole practitioner office from a retiring physician. It's a risk, but they say that great deeds are usually wrought at great risk."

TYPICAL DAY: "Let the horses out of the corral at dawn and maybe even go for a ride. Then, it's surgery if scheduled and a day of torn ligaments and sprained ankles. The evening finds me on the sidelines of one of our high school sports teams."

HOBBIES: Horseback riding and golf. "If I combined activities, would it be polo?"

LAST BOOK READ: Missouri: Images of Nature, photographed by Charles Gurche.

LATEST ACCOMPLISHMENT: "Testing a protective knee pad I'm developing for use by football players."

QUOTE: "Physicians are being deterred from trying new procedures and therapies in patient care. We need to cut the chains and encourage individual innovation."

PROFILE: Independent and open-minded. "Living in the country, I don't feel hampered by social convention. I can work on new ways of doing things."

RETIREMENT MANAGER: MonetaMed, the MSMA retirement and financial management service from Moneta Group, Inc. "The professionals at Moneta Group find new ways of looking at age-old questions."

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133rd Annual Convention Registration

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Joan Tait, Kansas City
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Charles H. Whhite, Prairie Village, KS
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William Park, Springfield
W.H.Penninger, Springfield
Fred Potts, Strafford
Ira Joe Pryor, Joplin
C. Norman Shealy, Springfield
Wade Shipman, Springfield
J.F. Terry, Jr., Springfield
Janie Vale, Springfield
Jim Waterfield, Springfield
C.C. Whitlock, Springfield
Robert Zahn, Springfield

Ninth Councilor District — 3

Teodore C. Tang, Salem
Mark Vandewalker, Rolla
Joe A. Wall, Houston

Tenth Councilor District — 14

Benjamin Albano, Crystal City
Edward Campbell, Cape Girardeau
Edward A. DuMontier, Farmington
L.W. Feltz, Perryville
T.J. Glenn, Cape Girardeau
Grinny H. Ho, Sikeston
R.A. Huckstep, Farmington
Christopher H. Jung, Cape Girardeau
James A.Kinder, Cape Girardeau
Ina Levenson, Poplar Bluff
Walter A. Schroeder, Cape Girardeau
Kirby L. Turner, Poplar Bluff
Steve Whitten, Cape Girardeau
Michael Wulfers, Cape Girardeau

There were 516 MSMA Members; 250 Guests/Guest Physicians; 103 Auxiliary Members; 132 Exhibitors; and 25 Staff members present. Total registration was 1026.

Summary of Council Minutes 1990-1991

June 3, 1990
Lake of the Ozarks

A report from the Executive Committee contained several recommendations, which were approved by the full Council. These were:

- Approved of proposed language governing summary suspension powers of the Board of Healing Arts.
- Disapproval of participation in discussion of a Canadian-style health plan.
- Approval of Ms. Laura Carlson as AMA Alternate Delegate in place of Ms. Nasreen Syed, who resigned.
- Endorsement of an increase in MSMA representation on the MOMEDICO Board of Directors, plus suggestions for candidates to sit on the board.
- Approval of Physicians Health Committee budget of $62,000 for July through December.
- A commendation of the PHC for its fundraising work.
- Referral of PHC's proposed fee writeoffs to the Budget and Finance Committee.

MSMA Executive Vice President Royal Cooper proposed holding a workshop for Key Contacts on November 10 in Jefferson City. This was approved.

Gary Dyer, M.D., St. Joseph, noted that attendance at some county medical society meetings he visited had been quite low. The Council accepted his suggestion that each Councilor report to him what type of officer visitation was desired by the physicians in the area.

A resolution from the West Central Medical Society asking for physician involvement in community drug abuse prevention programs was referred to the Executive Committee.

A resolution urging continued state funding for the Women, Infants and Children (WIC) supplemental food program was adopted. The resolution also contained a directive that it be taken to the AMA annual meeting.

The Council voted to endorse the candidacies of Marvin Singleton, M.D., *Seneca;* Tommy Macdonnell, M.D., *Marshfield*; and Mary C. Kasten, *Cape Girardeau.*

Following the suggestion of several Councilors, it was decided to make the final edition of the Legislative Report available for posting on hospital bulletin boards. This would make the MSMA's lobbying efforts more visible to non-member physicians.

A report on the actions and referrals of the resolutions from the 1990 Annual Convention was accepted.

August 26, 1990
Jefferson City

Frank Mohs, M.D., Medical Director at General American/Medicare Part B, presented a review of the new physician payment schedules, the RBRVS, and mandatory claims filing by physicians.

The Council's business included actions on several resolutions referred to it by the 1990 House of Delegates. Resolution 37, dealing with the increase in health insurance costs to employers, was referred to the Commission on Medical Economics. The MSMA will continue to work with the Division of Insurance and third parties to gather the necessary data. The Council will also draft a resolution on business-medicine coalitions. The Council referred Resolution 40, on mandatory HIV testing, to the Committee on Legislative Affairs.

A final resolution on drug abuse, brought by the West Central Medical Society, was adopted.

The Council voted to raise the dues for regular membership in the Missouri Medical PAC to $50.

Councilors also approved the creation of a standardized program, including a videotape, that could be taken to officer visitations.

President Gary A. Dyer, M.D., gave his report. Councilors supported his suggestion that MSMA become involved in promoting science education at the elementary level in Missouri. The Council also gave Dr. Dyer permission to continue work on holding skin cancer screenings at the Capitol during the legislative session.

Hugh E. Stephenson, Jr., M.D., Columbia, received the Council's endorsement as a candidate for re-election to the AMA Council on Medical Education.

Sixth District Councilor A.J. Campbell, M.D., Sedalia, reported on the problems one physician in his district is having with Medicare. Having tried to resolve his problems on his own, this physician has since decided to retire early rather than fight it out with Medicare. The Council voted to try to assist this physician with his problems, even though he is not an MSMA member.

In other business, the Council aproved the appointment of Patrick Harr, M.D., Maryville, to the Committee to Preserve Health Care. Councilors also approved the Executive Committee's suggestions for nominees to the PRO Board.

December 16, 1990
Columbia

Following approval of the minutes of the previous meeting, treasurer Harry Cole, M.D., St. Louis, presented the report of the Budget and Finance Committee, including the proposed 1991 budget, which was approved.

The Budget and Finance Committee also recommended that Resolution No. 34 (A-90) not be adopted. This resolution would have provided funding for the Physicians Health Program via a membership dues assessment. The Committee said funding for the program is adequate, due to generous contributions from individuals, hospital medical staffs, and the physician-owned professional liability compainies. The Council concurred.

David Clark, M.D., chairman, reported from the Commission on Interspecialty Medicine the recommendation to adopt Resolution No. 40 (A-90), dealing with mandatory HIV testing in cases of possible exposure of a health care worker. The Council agreed.

The Interspecialty Commission also recommended adoption of a policy statement that only physicians be permitted to use surgical lasers. The statement was adopted.

David Wilkinson, M.D., St. Louis, president of the State Board of Healing Arts, introduced the new executive director of the Board, Frederick Tromans, who addressed the Council.

President Gary Dyer, M.D., reported several recommendations from the Executive Committee, which were approved by Council. These recommendations were opposition to the narrowing of Legal Expense Fund coverage for physicians providing child health care at county health departments; opposition to the Missouri Bar's proposal to limit allowable fees for providing copies of medical records; and dissemination of an MSMA report on employer health care costs.

In addition, the Council approved the Executive Committee's recommendation to participate in formulating practice parameters, with input from the Commission on Interspecialty Medicine.

In response to the crisis in the Persian Gulf, to which many physician military reservists have been called, the Council approved a waiver of dues for physician member reservists called to active military duty.

Councilors also approved the MSMA's participation in a pilot AMA membership program.

The Council endorsed William H. Huffaker, M.D., St. Louis, for nomination to a special advisory council to the U.S. Health and Human Services Department.

Several Councilors voiced their dissatisfaction with the way HCFA has developed the Medicare participating physician program. This year, physicians may opt out of the program until February 15, but non-participating physicians are not given the same opportunity to change their status to "participating." The MSMA will send a letter to HHS and HCFA.

Councilors adopted a resolution complimenting Frederick Peterson, M.D.'s work with the state PRO.

The Council approved MSMA's active solicitation of matriculants to Missouri medical schools for membership in the Association. This will help the students get a "head start" before the AMA begins its membership solicitations.

A report from the Committee on Legislative Affairs was heard. The following recommendations were approved: an ad hoc committee to be appointed to study health care costs and the working uninsured; two sections of the Board of Healing Arts' proposed bill modifying the practice act to be referred to legal counsel to clarify MSMA's position; a committee — composed of members from MSMA, Missouri Chapter of ACOG, and the Missouri Academy of Family Physicians — to study access and coverage for obstetrical care, particularly in rural Missouri.

Upon request from the Missouri PRO by William Shell, M.D., Sikeston, Councilors approved dissemination of information about HCFA's abandonment of preadmission certification and review in favor of new, unproven methods, and how the bureacracy is now working to justify and extend its own existence.

President-Elect Dorothy Reister, M.D., suggested an ad hoc committee on membership be formed. The Council concurred.

February 3, 1991
Jefferson City

Several recommendations from the Executive Committee were reviewed and approved by the Council. Summaries of these recommendations follow:

On the matter of malpractice coverage under the state's Legal Expense Fund for physicians working in county health clinics, it was decided that Royal Cooper should present three proposals to the Attorney General, namely, that a child be defined as a person up to the age of 13 or 14; that a cap of $1 million be placed on claims under the Legal Expensē Fund; that all physicians, including retirees, who are working in free clinics be covered.

Both the Executive Committee and Blue Ribbon Committee to study tort reform recommended that the Memorandum of Understanding be signed, with the provision that the Blue Ribbon Committee continue to work on federal tort reform legislation and appropriate state-level legislation.

Acceptance of a proposal from a new MSMA-sponsored major medical carrier.

On the matter of forming a committee to study the problem of health care access and the uninsured, it was decided to form the committee but have it review the work of the many other groups that are studying this problem. Otherwise, the work would be redundant. On a related matter, that of forming a committee to study the problem of obstetrical care and access, especially in rural Missouri, it was decided that this committee would also be redundant. Pending further information, the Council voted to table the matter.

The Council also approved the following actions of the Executive Committee: To drop consideration of telephone consultation services; to nominate Drs. William Shell and Frank Mohs to the PRO Board; to nominate Drs. Carl Strauss and Ronald Riner (in addition to Dr. Huffaker) for the HHS Practicing Physicians Health Committee; and distribution of information on PRO preadmission certification.

Dr. Jerry Murrell presented a report from the Committee on Legislative Affairs. It contained several recommendations. The Council took the following actions:

- opposed Board of Healing Arts' proposed "search & seizure" bill and asked that the bill be reworded to specify how searches and seizures may be carried out;
- approved reactivation of the MSMA-Board of Healing Arts liaison committee;
- approved the drafting of legislation giving the Board authority over occupational therapists, respiratory therapists and physician assistants;
- approved support of Chapter 383 insurance companies in their resistance of restrictive legislation;
- endorsed Missouri Academy of Family Physician-supported legislation (Health Access Incentive Fund) that encourages physicians to locate in areas of need;
- opposed St. Louis Health Department-sponsored effort to use increased physician registration fees to encourage physicians to locate in underserved areas;
- approved adoption of draft legislation to cover UR agencies, but decided not to pursue it for at least three years;
- approved a meeting of the interprofessional committee (MSMA, MHA, Bar) to discuss the proposed fee cap for medical records;
- supported legislation forming child death review teams;
- supported legislation mandating the offering of child health care insurance coverage;
- voted to inform the ophthalmology group of flawed language in their bill on laser usage, with an offer to help in rewriting it.

The Council also referred to the Executive Committee HCFA's proposed policy standardizing the definition of "global" surgical fees/payments. Councilors asked that AMA and appropriate national groups (such as ACS) be consulted for their advice and input.

The body also granted continued support for the establishment of a St. Louis Regional Health Care District.

After hearing that the Data Bank considers prescription violations synonymous with narcotics/drug abuse violations, the Council voted to ask HCFA to investigate this and change it.

Dr. Dyer's reappointments of Donald G. Sessions, M.D., St. Louis, as editor of *Missouri Medicine*, and Ramona Chapman, M.D., Joplin, as associate editor were approved.

The endorsement of George M. Bohigian, M.D., St. Louis, for an appointment to the AMA Council on Judicial Affairs was approved.

April 3, 1991
Kansas City

The minutes of the February 3, 1991 Council meeting were aproved.

Royal Cooper, Executive Vice President, reported that as of April 1, 80% of the 1991 dues had been collected.

The Council approved the following proxies: Proxy for MSMI — H. Peter Ekern, M.D., and Royal Cooper; Proxy for MOMEDICO Annual Meeting on May 10 — Robert Gibbons, M.D., Meredith Payne, M.D., the new Executive Committee and Royal Cooper.

Mr. Cooper announced that the Auxiliary would hold a Public Affairs Breakfast at 7:30 a.m., Saturday, April 6 with Senator Pat Danner speaking.

Dr. Gary Dyer, President, asked the Councilors to provide him a nominee from their District to serve on the Nominating Committee. The Council then approved the following nominees for the Publications Committee for 1991-1992: Donald Sessions, M.D., *Chairman*; Ramona Chapman, M.D., *Vice Chairman*; Jack J. Curtis, M.D.; John S. Daniels, M.D.; and Stephen Hamburger, M.D.

The Council also approved the actions taken by the Executive Committee as outlined by Dr. Dyer.

Mrs. Carol Sparkman, President of the MSMA Auxiliary, stated that Governor Ashcroft had recently signed the proclamation on Doctors' Day. She reminded those present of the AMA-ERF fundraiser hat would be held on April 4. All physicians whose spouse is a member of the Auxiliary will be given a gold sticker to wear on their badge indicating that their spouse is a member of the Auxiliary.

On behalf of the Auxiliary, Mrs. Sparkman thanked the Council for their support and encouragement during the past year.

Dr. Patrick Harr, Chairman of the Professional Liability and Tort Reform Blue Ribbon Committee, presented the following resolution which the Council approved:

RESOLVED, that the MSMA authorize the Professional Liability and Tort Reform Blue Ribbon Committee to design and establish a Risk Management Program for members of the Missouri State Medical Association. This program should be presented to the MSMA Council at its August meeting. The Program will be implemented upon approval of the Council; and be it further

RESOLVED, that at the same time, this Committee also develop a tort reform legislative package to be presented to the Legislature at the appropriate time.

The Council approved submitting the resolution to the House of Delegates.

The Council also approved a Report of the Ad Hoc Committee of Graduates of Foreign Medical Schools as distributed.

Dr. Jo-Ellyn M. Ryall, Speaker of the House, welcomed those present to the 133rd Annual Session and stated that to her knowledge there were 29 resolutions to be discussed. ■

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Missouri State Medical Foundation

Friday, April 5, 1991
Westin Crown Center
Kansas City, Missouri

MSMF Annual Meeting

The Annual Meeting of the Missouri State Medical Foundation was called to order by Miles C. Whitener, M.D., President. The minutes of the 1990 Annual Meeting were approved as published in the July 1990 issue of *Missouri Medicine.*

The motion was made and seconded to re-elect the current officers of the Foundation. The same motion was approved for the members of the Board of Trustees. Therefore, the officers of the MSMF for 1991-1992 include:

President – Miles C. Whitener, M.D., *St. Louis*
Vice-President – Frederick W. Hahn, M.D., *Kansas City*
Secretary/Treasurer – Robert H. Tanner, M.D., *Jefferson City*
Assistant Secretary – Sidney A. Dulle, CPA, *MSMA Staff, Jefferson City*

The following physicians will continue to serve on the MSMF Board of Trustees:

Larry P. Courter, M.D., *Osage Beach*
Robert O. Schaaf, M.D., *Gower*
Patrick B. Harr, M.D., *Maryville*
Donald Fakhoury, M.D., *Kansas City*
Christopher H. Jung, M.D., *Cape Girardeau*
Mary E.S. Chase, M.D., *St. Louis*

Regarding new business, the Board asked Sid Dulle to draft a proposal stating that for students who decide to pursue a second degree after receiving their medical degree, their repayment of the loan will be based on the following policy: While the student is in medical school, interest will accrue at the rate of 4 percent. During residency, the interest continues to accrue at 10 percent and interest only is due annually during the four years of residency. During the student's pursuance of a second degree, interest will continue to accrue at 4 percent. This policy is pending approval upon the Board members receiving a copy of the draft proposal. The Board agreed that the first student to benefit from the new policy will be Stephen George, the student who wrote the original letter regarding his pursuance of a second degree.

Sid Dulle also brought the Board up-to-date on the progress of the Foundation in pursuing doubtful accounts. As of April 1, 1991, 19 cases out of 446 loans, about 4 percent, required action of attorneys. Six of the 19 have responded to letters and have begun repayment schedules.

For the 1990-1991 academic year, the Foundation awarded $163,000 in loans. Mr. Dulle indicated that this number was well below last year's loan total of $193,000, but stated that the reason was simply a decline in applications. Had there been more applications, more loans would have been awarded. After further discussion, the Board approved raising the amount of loans given from $2,000 annually to $4,000 annually.

Mr. Dulle also discussed the 1990 Financial Statement briefly, stating that the Foundation brought in excess revenues of $147,000. Total assets were just over $2.2 million, making the Foundation financially stable.

Mike Grimes, from Prudential-Bache Securities, discussed the charitable annuity program at length. The Board voted to take no more active solicitation in regard to the charitable annuity program at the present time, maintaining it as an alternative source of income for the Foundation.

The Board also gave preliminary approval for having a program designed for the MSMF office to help with loan tracking. Mr. Dulle agreed to put the information together to bring back to the Board for further evaluation before final approval.

The meeting was then adjourned. ■

133rd Annual Convention Exhibitors

Abbott Laboratories
Abbott Park, IL

Advanced Medical Data Systems, Inc.
Kansas City

Baird, Kurtz & Dobson, CPAs
Springfield

Benchmark Computer Systems
Overland Park, KS

Blue Cross & Blue Shield of Missouri
St. Louis

Boyd Insurance & Financial Services
Springfield

Dodson Group
Springfield

Fisons Pharmaceuticals
Columbia

Forrest T. Jones and Company, Inc.
Kansas City

Intelligent Business Systems, Inc.
Jefferson City

International Medical Electronics, Ltd.
Kansas City

The Key Company
St. Louis

MAWD Medical Laboratories
Kansas City

Medical Billing Associates, Inc.
Sedalia

Medical Defense Associates
Springfield

The Medical Protective Company
Ft. Wayne, IN

Metropolitan Reference Laboratories, Inc.
St. Louis

Midwest Medicine Supply Company
St. Louis

Missouri Rehabilitation Center
Mt. Vernon

MOMEDICO
St. Louis

Moneta Group
St. Louis

PIE Mutual Insurance Company
Cleveland, Ohio

Rebound, Inc.
Kansas City

Risk Control Associates, Inc.
Springfield

Schering Corporation
Columbia

Smith Kline Beecham Pharmaceuticals
St. Louis

SmithKline Beecham Pharmaceuticals
Philadelphia, PA

The Upjohn Company
Kansas City

In lieu of an exhibit, the following firm has made a cash donation to assist in the sponsorship of Scientific Sessions:

Eli Lilly and Company-Pharmaceutical Division
Indianapolis, IN

1991 MPH Contributors

The Missouri State Medical Association and the Missouri Physicians' Health Program would like to thank the following contributors to the MPH Program. It is through the generous contributions of these institutions that the MPH Program can continue to assist physicians in beginning and maintaining their recovery process.

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Dexter

Moberly Regional Medical Center
Moberly

Moberly Regional Medical Center — Medical Staff
Moberly

Risk Control Associates
Springfield

Freeman Hospital — Medical Staff
Joplin

Pershing Memorial Hospital — Medical Staff
Brookfield

Pershing Memorial Hospital — Medical Staff
Marceline

P.I.E. Mutual Insurance Company
Cleveland, Ohio

Memorial Community Hospital — Medical Staff
Jefferson City

Christian Hospital Northeast/Northwest — Medical Staff
St. Louis

Research Medical Center — Medical Staff
Kansas City

Audrain Medical Center
Mexico

Menorah Medical Center — Medical Staff
Kansas City

Lester E. Cox Medical Center — Medical Staff
Springfield

Research Health Services
Kansas City

St. Mary's Hospital of Blue Springs — Medical Staff
Blue Springs

St. Luke's Hospital of Kansas City — Medical Staff
Kansas City

Independence Regional Health Center — Medical Staff
Independence

Independence Regional Health Center
Independence

Incarnate Word Hospital — Medical Staff
St. Louis

Incarnate Word Hospital
St. Louis

Medical Center of Independence — Medical Staff
Independence

The Children's Mercy Hospital — Medical Staff
Kansas City

St. Mary's Health Center — Medical Staff
Jefferson City

MOMEDICO
St. Louis

Baptist Medical Center — Medical Staff
Kansas City

Baptist Medical Center
Kansas City

St. Joseph's Health Center — Medical/Dental Staff
Kansas City

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AIR FORCE

Continuing Medical Education

The continuing medical education accreditation program of the MSMA has full approval by the AMA's Council on Medical Education. The institutions and functions listed here qualify for Category I credit for the AMA Physician's Recognition Award. All accredited institutions in Missouri are invited to send this information for listing in MISSOURI MEDICINE. Please remember to include the name of the individual who can be contacted at your institution for additional information about your CME events.

July

12 - 13 **Advanced Trauma Life Support Provider Course** — Location: St. Louis University, Margaret McCormick Doisy Learning Resources Center, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

20 - 21 **Sjogren's Syndrome: A Total Perspective** — Location: St. Louis University, Margaret McCormick Doisy Learning Resources Center, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

20 - 27 **9th Annual Medical Seminar, Topics in Contemporary Medicine** — Location: Plummer's Great Slave Lake Lodge, Northwest Territories, Canada. Contact: Joseph F. Bocklage, M.D., 103 Oakdale Medical Center, 3366 Oakdale Avenue North, Minneapolis, MN 55422. 612/588-9478.

26 **ACLS Recertification Course** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand, St. Louis, MO 63104. 1-800-533-2712.

26 - 27 **Advanced Cardiac Life Support Provided Courses (Limited to SLU residents and staff)** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

31 - August 4 **Southern Association for Oncology 4th Annual Meeting** -- Location: Crystal Palace, Nassau, Bahamas. Contact: Southern Association for Oncology, 205/942-0530.

August

6 - 8 **Introduction to Doppler Echocardiography** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

10 **Small Incision Phacoemulsification** — Location: The Ritz Carlton Hotel, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

10 - 16 **Tenth Annual Scientific Meeting and Exhibition of the Society of Magnetic Resonance in Medicine** — Location: San Francisco, CA. Contact: SMRM, 1918 University Avenue, Suite 3C, Berkely, CA 94704. 415/841-1899. FAX: 415/841-2340.

24 **Management Strategies For the Hypertensive Patient and Patients With Selective Cardiac Problems** — Location: The Ritz Carlton Hotel, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

September

6-7 **Current Issues in Hemostasis and Blood Transfusion** — Location: Margaret McCormick Doisy Learning Resources Center, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

10 - 11 **Transesophageal Echocardiography Course** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

13 **Pulmonary Symposium: Update in COPD** -- Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University Medical Center, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104-1083. 1-800-533-2712.

18 - 20 **Pediatric Advanced Cardiac & Trauma Support For Life and Pediatric Advanced Life Support Course (PALS/PACTS)** -- Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University Medical Center, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104-1083. 1-800-533-2712.

23 - 25 **Symposium on Aging, Musculoskeletal Disorders and Care of the Frail Elderly** -- Location: Clarion Hotel, St. Louis, MO. Contact: Conference Secretary, VA Medical Center, GRECC (111G-JB), St. Louis, MO 63125, FTS 280-6510 or 314/894-6510.

26 **Pediatric Penetrating Trauma** -- Location: Adam's Mark Hotel, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

27 - 28 **Advanced Trauma Life Support Provider Course** -- Location: St. Louis University, Margaret McCormick Doisy Learning Resources Center, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand, St. Louis, MO 63104. 1-800-533-2712.

October

4 - 6 **Ozark Chest Conference XI, "New Therapies in Asthma Management and Pulmonary Thromboembolism"** -- Location: Tan-Tar-A Resort Hotel, Lake of the Ozarks, MO. Contact: American Lung Association of Western Missouri, 2007 Broadway, Kansas City, MO 64108. 816/842-5242.

6 - 7 **Advanced Cardiac Life Support Provider Course** -- Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University Medical Center, CME Office 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-533-2712.

8 - 10 **Introduction to Doppler Echocardiography** -- Location: St. Louis University Medical Center, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

10 **Pediatric Advanced Life Support Recertification Course (PALS)** -- Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University Medical Center, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104-1083. 1-800-533-2712.

10 - 11 **Nursing Microsurgery Workshop - Hands-On Experience** -- Location: St. Louis University School of Medicine, St. Louis, MO. Contact: CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

11 - 12 **Cancer Symposium** -- Location: Sheraton at Westport, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

14 - 18 **The Medicolegal Death Investigator Training Course** -- Location: St. Louis University, Margaret McCormick Doisy Learning Resources Center, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

18 - 19 **34th Alumni Weekend, University of Missouri** -- Location: Columbia, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

18 - 20 **Microsurgery of the Lumbar and Cervical Spine** -- Location: St. Louis University School of Medicine, St. Louis, MO. Contact: CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

29 - 30 **Second Annual Spinal Cord Injury Symposium From ICU To Rahab** -- Location: St. Louis University Medical Center, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

November

5 - 6 **Transesophageal Echocardiography Course** -- Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University Medical Center, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

7 - 10 **Surgical Approaches to the Skull Base** -- Location: St. Louis University School of Medicine, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

13 - 15 **Pediatric Advanced Cardiac & Trauma Support For Life and Pediatric Advanced Life Support Course (PACTS/PALS)** -- Location: St. Louis University Medical Center, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

15 - 16 **OB/GYN Update 1991** -- Location: Holiday Inn Executive Center, Columbia, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

Medical School News

University of Missouri-Columbia

Two administrative changes are taking place this summer at the MU School of Medicine, **Dean Lester Bryant, M.D.**, announced.

Effective July 1, **Michael C. Perry, M.D.**, chairman of the department of medicine, became senior associate dean. His replacement is **Karl T. Weber, M.D.**, who also will continue his duties as director of the department's division of cardiology. Weber was selected in a search of internal candidates.

In his new role, Perry will spend a major part of his time at the Ellis Fischel Cancer Center, which merged last year with MU's Health Sciences Center. His immediate goals include setting up academic and patient programs at Ellis Fischel. He also will take on other administrative duties as Bryant's second-in-command.

Michael Perry, M.D.

Karl Weber, M.D.

Perry joined MU's division of hematology and oncology, which is part of the department of medicine, in 1975. He has chaired the department for eight years. Since 1969, he has conducted lung cancer research as a member of the National Cancer Institute's Cancer and Leukemia Group B.

Weber came to MU last summer from the University of Chicago, where he had been professor of medicine since 1983. He also directed the division of cardiology and Cardiovascular Institute at Michael Reese Hospital and Medical Center in Chicago. Before moving to that city, he served on the University of Pennsylvania faculty for nine years.

His plans include forming more clinical outreach efforts in mid-Missouri and developing a common research theme that "would foster crosstalk and sharing of resources between divisions and the basic sciences." Among Weber's ideas for education is restructuring the training program for research fellows and resident physicians, including the addition of a basic science curriculum and an increased number of trainees. To draw more residents into academic careers, he would like to establish a clinical investigator track that would provide a flexible program of clinical training and research for residents.

Weber and his research team, including four faculty members who came with him from Chicago, have drawn much international attention. Their major work addresses the abnormal growth of the heart's cells that causes its structure to become abnormal, leading to impaired function or heart failure. The group previously identified the process and now is working to discover what makes this abnormal growth take place.

Weber, who has been associate editor of *Circulation Research* since 1986, recently was named to the international advisory board of the *Canadian Journal of Cardiology.*

John J. Oro, M.D., MU associate professor of surgery, has been appointed chief of the division of neurosurgery and director of the neurosurgery residency program.

Oro earned his medical degree at the University of Texas Medical Branch in Galveston and spent his first year of postgraduate training here. He completed his neurosurgery training at MU in 1984 and remained as a member of the faculty. He was promoted to associate professor in 1990.

Oro has developed one of the few laboratories in the country to work on motor-evoked potential. He recently introduced stereotactic surgery to mid-Missouri.

The position formerly was held by **Clark Watts, M.D.** Watts, who had been at MU since 1976, left in January to accept a similar job at the University of Maryland. Oro had served as interim chief since that time.

MU's department of psychiatry and Missouri Department of Mental Health now are formally working together to make more effective and efficient the care of criminal offenders who need psychiatric treatment.

This new collaboration was formalized during a May ceremony on the grounds of Fulton State Hospital, where the state's medium- and maximum-security mentally ill offenders are housed.

Bernard D. Beitman, M.D., interim chairman of psychiatry, says that the department hopes to build on an already strong relationship with the Department of Mental Health that has been in place for years through the Mid-Missouri Mental Health Center, Fulton State Hospital and the Missouri Institute of Psychiatry in St. Louis.

In addition to the forensic emphasis, the MU department is funding a project to develop a systematic evaluation of behavior and behavioral change in children and adolescents in the state mental-health system. The department also is striving to strengthen research in the treatment of chronic schizophrenia at Fulton State Hospital, Beitman said.

As part of the agreement, MU forensic psychiatrist **Bruce Harry, M.D.**, will direct the hospital's new academic training Center for Evaluation, Treatment and Study of Mentally Disordered Offenders. The School of Medicine also has donated use of two computers. A special software package will assist in the diagnosis and treatment of clients and aid professionals in predicting how they will adjust to society once they are released.

Through the collaboration, MU plans to offer in the near future the state's first fellowship program to train forensic psychiatrists.

■ An MU medical student from Clayton has won a Pew Medical Fellowship to work for a year with researchers at The Rockefeller University in New York City.

Steven J. Tucker, who recently completed his second-year at MU's School of Medicine, is the second MU medical student in three years to be awarded the honor. He was one of four students nationwide chosen for the 1991-1992 fellowships.

Beginning in July, Tucker will take a year's leave from medical school to perform laboratory and clinical research into obesity. He specifically is interested in the brain hormones that cause some people to overeat.

Rockefeller, a graduate-level university, is renowned for its biomedical research and has produced many Novel Prize winners. The Pew fellows and their mentors constitute Rockefeller's Center of Nutritional Excellence, a program that concentrates on biomedical science relevant to current problems in human nutrition.

■ **Karl D. Nolph, M.D.**, professor and director of nephrology, delivered his presidential address April 25 at the American Society for Artificial Internal Organs' 37th annual meeting, held in Chicago. Nolph, who was completing his one-year term at the helm of the organization, spoke on "ASAIO – Past, Present and Future." Professors **Zbylut Twardowski, M.D., Ramesh Khanna, M.D.,** and **John Van Stone, M.D.**, also made presentations on kidney dialysis at the conference.

Since then, Nolph has made three presentations and chaired two plenary sessions, at European medical meetings in Interlaken, Switzerland. Following those activities, he completed a lecture tour of Italy. During this time, he chaired a meeting of the council, officers and committee chairs and members of the International Society for Peritoneal Dialysis in Vicenza, Italy. Nolph currently is president of the society.

This month, he will be the distinguished guest lecturer at the 1991 meeting of the Japanese Society of Dialysis Therapy in Kobe City. Nolph will speak on the status of peritoneal dialysis to an anticipated audience of nearly 4,000 Japanese nephrologists.

■ **John Yarbro, M.D., Ph.D.**, professor and director of hematology and medical oncology, was named the 1991 Distinguished Alumnus of the University of Louisville School of Medicine.

Washington University

■ **Jay S. Pepose, M.D., Ph.D.**, associate professor of ophthalmology and visual science at Washington University School of Medicine in St. Louis, recently received the Cogan Award for his outstanding contributions to ophthalmic research.

Pepose is the fourth scientist to receive the award, which is presented annually by the Association for Research in Vision and Ophthalmology (ARVO), an international society of vision scientist. Established in 1988 to honor ophthalmologist **David G. Cogan, M.D.**, the award recognized young researchers who have made significant contributions to understanding disorders of the human eye and visual system. Researchers are nominated by their colleagues.

Pepose, who is also assistant professor of pathology, studies infectious and inflammatory diseases of the eye. His pioneering studies of the ophthalmic manifestation of AIDS demonstrated that the cotton-wool spots that affect the vision of many AIDS patients are caused by microvascular lesions not cytomegalovirus (CMV) infection of the retina. More recently, he demonstrated that multiple co-infections in the retina of AIDS patients with viruses such as HIV and CMV may lead to retinal death and blindness because the viruses activate each other's replication.

Pepose joined the School of Medicine faculty in 1988 as an associate professor of ophthalmology and assistant professor of pathology. He has been medical director of the St. Louis Eye Bank since 1989.

■ **Paul E. Lacy, M.D., Ph.D.**, Robert L. Kroc Professor of Pathology at Washington University School of Medicine in St. Louis, has been elected a fellow of the American Academy of Arts and Sciences. The academy is one of the nation's oldest societies of leaders in science, scholarship, the arts and public affairs.

Lacy, one of 195 new fellows elected to the 211-year-old academy, is recognized worldwide as a leader in the study of insulin-dependent diabetes mellitus. One of his most significant contributions has been the transplantation of islets — cells in the pancreas that produce insulin — for the treatment of diabetes. Lacy devised many of the techniques used to isolate and purify human islets. Islet transplantation has temporarily eradicated the need for insulin injections in several patients with juvenile-onset diabetes.

Lacy joined the School of Medicine faculty in 1956 and for more than 20 years was Edward Mallinckrodt Professor and Head of the Department of Pathology. During that time, he served also as pathologist-in-chief at Barnes, Jewish and Children's hospitals, all sponsoring institutions of Washington University Medical Center.

St. Louis University

■ St. Louis University has received approval to establish Missouri's first school of public health. The new school will become one of 27 public health schools in the country and is the first new school designated at the university in 60 years.

The Missouri Department of Health hailed the formation of the school. According to **Dr. John Bagby**, state health director, the formation of the school may dramatically improve the quality of public health education and service delivery in Missouri.

The school grew out of the Center for Health Services Education and Research (CHSER), which was established in 1979. At that time, the center was a consolidation of existing health services programs; among them, the nationally respected master of health administration porgram (MHA) begun in the 1940s.

James R. Kimmey, M.D., M.P.H., professor of public health and director of CHSER, has been named dean of the new school, which will provide graduate education in the field of public health beginning in the fall of 1991. Programs will focus on those social, physical and medical sciences aimed at solving complex problems in both the organization and delivery of health programs and services nationwide.

■ The Center for Vaccine Development at St. Louis University School of Medicine has begun testing a fourth AIDS vaccine in healthy human volunteers. The vaccine is being called a scientific advancement in the quest to prevent human immunodeficiency virus (HIV) infection.

The newest candidate vaccine is gp120, a genetically engineered combination of a protein and carbohydrate that has been developed and produced by Genentech Inc. The vaccine gp120 molecule simulates the place of gp160 that extends out from the outer envelope shell of HIV. In the intact virus, the gp160 molecule is composed of the gp120 and another molecule called gp41, which anchors gp120 to the envelope shell of the virus.

This vaccine comes on the heels of last October's vaccine (Immuno-Ag gp160) approved by the Food and Drug Administration for experimental trials. Like the gp120, that vaccine is also expected to trigger a broader immune response than others currently being tested.

■ In what researchers are calling "a major step forward" in the search to discover what causes Alzheimer's disease, scientists at St. Louis University School of Medicine and the City of Hope medical facility in Duarte, California have found that memory loss may be attributed, in part, to a specific brain protein.

This protein, called beta-amyloid, is found in all human brains, and for reasons not yet clear, there is an increased amount of this protein in people with Alzheimer's disease, according to co-investigator **John E. Morley, M.D.**, Dammert Professor of Gerontology and director of the division of geriatric medicine at St. Louis University School of Medicine.

The research is published in the current edition of the Proceedings of the National Academy of Sciences. It is the first time scientists have confirmed a direct link between the beta-amyloid protein and memory retention in a living animal. Previous findings already indicated that the protein caused brain cell degeneration. According to researchers these findings are significant because more than four million people in the United States are currently diagnosed with Alzheimer's, with more than 40,000 of those cases in the St. Louis area alone.

Other scientists involved in the research include **James F. Flood, Ph.D.**, professor of internal medicine, St. Louis University School of Medicine and chief of the neuropharmacology laboratory, Veterans Affairs Medical Center; and **Eugene Roberts**, a biochemist with the Beckman Research Institute at the City of Hope.

■ A Saint Louis University School of Medicine faculty member, an alumnus and a Saint Louis University technician were the recipients of the second annual biomedical research awards, presented during a special program in May. This awards program highlights the advances in medicine made through animal research at a time when public awareness of the benefits of animal research is imperative.

Theodore Cooper, M.D., Ph.D., chairman and chief executive officer of The Upjohn Company was awarded the alumni achievement award in biomedical research.

Gregory S. Hageman, Ph.D., associate professor of ophthalmology, was the recipient of the St. Francis of Assisi Research Award for excellence in biomedical research.

A meritorious technician award was presented to **Lillian I. Vickery**, a research assistant in the pharmacology department. Vickery was honored for making significant contributions to research through the application of exemplary scientific skills combined with exceptionally thoughtful and caring use of laboratory animals.

■ St. Louis University has been named the principal recipient of a major endowment from the Admiral Sydney W. and Sylva N. Souers Charitable Trust. The gift, which will generate more than $300,000 annually, will be used to establish the Souers Stroke Institute at St. Louis University's Medical Center. It was bestowed at the bequest of Mrs. Souers, who passed away January 7, 1991.

According to **John B. Selhorst, M.D.**, professor and chairman of the department of neurology, the Souers Stroke Institute will be devoted to research into the cerebral circulation and metabolism of the nervous system. The Institute will also provide needed education regarding stroke to physicians, investigators and students and will focus on the rehabilitation of individuals afflicted with stroke, including guidance for their families.

Dr. Selhorst will be the institute's chief operating officer. **Camilo R. Gomez, M.D.**, assistant professor of neurology and director of the current Stroke Resource Center, will become the Institute's director. The new funding will help develop a basic science laboratory, expand clinical investigations using neurosonology and initiate studies toward prevention and intervention in stroke. The gift will also fund the establishmemt of endowed chairs and a visiting scholars program.

Admiral Sydney Souers, former president and chairman of General American Life Insurance Company, died in 1973 following a debilitating stroke. In 1987, his wife, **Sylvia N. Souers**, decided to contribute to a stroke program in the St. Louis area. After meeting with neurologists at St. Louis University School of Medicine, Mrs. Souers made an initial contribution of $200,000 to begin a comprehensive stroke program.

■ **Nicola C. Partridge, Ph.D.**, assistant professor of pediatrics, assistant professor of pharmacological and physiological science, and assistant professor of orthopedic surgery, St. Louis University School of Medicine, has been awarded a four-year, $422,889 grant from the National Institute of Arthritis and Musculoskeletal and Skin Diseases.

The grant will be used to study "Osteoblast Mediated Turnover of Collagenase in Bone." The osteoblast is one of many cells involved in bone formation and breakdown. This cell synthesizes many factors important in forming bone, including the main protein component of bone, collagen.

In addition, the osteoblast also assists in the breakdown of bone by producing an enzyme, collagenase, which destroys collagen. Dr. Partridge has demonstrated that osteoblastic cells can bind collagenase which may regulate the amount of collagenase outside of the cell. This research will hopefully lead to a better overall understanding of bone formation and bone breakdown.

■ St. Louis University School of Medicine has received a $158,000 grant from the National Center for Research Resources to fund the acquisition of scientific equipment. The money is being used to purchase a confocal fluorescence imaging system.

The imaging system is a significant scientific tool because it allows researchers to study the structure and make-up of cells three-dimensionally with the help of a laser and a computer. By identifying the fluorescent light that molecules emit during activity, scientists can trace molecules within cells and map their distribution.

According to **David Lagunoff, M.D.**, associate dean for research and assistant vice president for research and development at St. Louis University Medical Center, the confocal imaging system is the third major scientific instrument purchased with instrumentation grant funds. Grants are awarded to institutions that demonstrate a significant number of research activities.

■ Researchers at St. Louis University School of Medicine say the use of laparoscopic techniques, a minimally invasive procedure, is just as effective as standard surgery in evaluating lymph nodes associated with prostate cancer.

According to **Raul O. Parra, M.D.**, associate professor of surgery and director of the division of urology at St. Louis University School of Medicine, the difference between the two procedures is that laparoscopy is more cost effective and patients have a faster rate of recovery.

With the laparoscope, patients with advanced prostate cancer heal from the procedure quicker and begin the next phase of treatment faster. In June Dr. Parra's research was presented at the 86th annual meeting of the American Urological Association in Canada and at the 9th World Congress on Endourology in Austria.

New Members

■ **Ryan W. Couchman, M.D.**, 533 Couch Avenue, #220, Kirkwood 63122, has become a member of the Missouri State Medical Association. Dr. Couchman received his preliminary education at Rice University and obtained his medical degree at the St. Louis University School of Medicine in 1986. He completed his residency at St. Louis University Medical Center, St. Louis, MO. Dr. Couchman specializes in orthopedic surgery.

■ **Robert D. Craig, M.D.**, St. Louis, has become a member of the Missouri State Medical Association. Dr. Craig received his preliminary education at the University of Missouri-Rolla and obtained his medical degree at the University of Arkansas School of Medicine in 1975. He completed his residency at the University of Arkansas Health Sciences Center, Little Rock, AR. Dr. Craig specializes in otolaryngology.

■ **Thomas B. Herrick, M.D.**, Suite 200, 2700 Hospital Drive, Kansas City 64116, has become a member of the Clay-Platte County Medical Society. Dr. Herrick received his preliminary education at the University of Illinois and obtained his medical degree at the University of Southern Illinois School of Medicine in 1985. He completed his residency at the University of Missouri, Columbia, MO. Dr. Herrick specializes in urology.

■ **Max S. Laguerre, M.D.**, 2750 Hospital Drive South, Suite 112, North Kansas City 64112, has become a member of the Missouri State Medical Association. Dr. Laguerre received his preliminary education at Princeton University and obtained his medical degree at Boston University School of Medicine in 1978. He completed his residency at Georgetown University Hospital, Washington, D.C. Dr. Laguerre specializes in radiation oncology.

■ **Henry H. Macler, Jr., M.D.**, 675 3015 N. Ballas Road, St. Louis 63131, has become a member of the St. Louis Metropolitan Medical Society. Dr. Macler obtained his medical degree at the Albany Medical College in 1974. He completed his residency at Peter Bent Brigham Hospital, Harvard University, Boston, MA. Dr. Macler specializes in anesthesiology.

■ **Bridget F. Ostrow, M.D.**, Cape Girardeau 63701, has become a member of the Cape Girardeau County Medical Society. Dr. Ostrow received her preliminary education at Loyola University and obtained her medical degree at St. Louis University School of Medicine in 1981. She completed her residency at St. Louis University Medical Center, St. Louis, MO. Dr. Ostrow specializes in vascular surgery.

■ **Louis B. Ostrow, M.D.**, Cape Girardeau 63701, has become a member of the Cape Girardeau County Medical Society. Dr. Ostrow received his preliminary education at Temple University and obtained his medical degree at New York Medical College in 1982. He completed his residency at David Grant USAF Medical Center, Travis, AFB, CA. Dr. Ostrow specializes in cardiothoracic surgery.

■ **Joel Picus, M.D.**, 2127 Lakeview, St. Louis 63131, has become a member of the Missouri State Medical Association. Dr. Picus received his preliminary education at the University of Illinois and obtained his medical degree at Harvard Medical School in 1984. He completed his residency at the University of California, San Francisco, CA. Dr. Picus specializes in internal medicine, oncology and hematology.

■ **Charles B. Rosen, M.D.**, St. Luke's Hospital, 4400 Wornall Road, Kansas City 64114, has become a member of the Missouri State Medical Association. Dr. Rosen received his preliminary education at Harvard University and obtained his medical degree at the Mayo Medical School in 1984. He completed his residency at the Mayo Graduate School of Medicine. Dr. Rosen specializes in general surgery.

■ **Everette T. Sitzman, M.D.**, Suite 312, 6400 Prospect, Kansas City 64132, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. Sitzman received his preliminary education at the University of Nebraska and obtained his medical degree at the University of Nebraska College of Medicine in 1986. He completed his residency at University of Kansas Medical Center, Kansas City, KS. Dr. Sitzman specializes in psychiatry.

■ **Seth Tilzer, M.D.**, 1245 Graham Road, Suite 506, Florissant 63031, has become a member of the St. Louis Metropolitan Medical Society. Dr. Tilzer obtained his medical degree at the University of Kansas Medical School in 1983. He completed his residency at Barnes Hospital, St. Louis, MO. Dr. Tilzer specializes in psychiatry.

■ **Jeanne M. Trimmer, M.D.**, 8515 Delmar Blvd., St. Louis 63124, has become a member of the Missouri State Medical Association. Dr. Trimmer received her preliminary education at Northwestern University and obtained her medical degree at Northwestern University School of Medicine in 1988. She completed her residency at St. Louis Children's Hospital, St. Louis, MO. Dr. Trimmer specializes in pediatrics.

■ Resident Section

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Linda L. Dieckmann, M.D. -- *internal medicine*
David D. Edalati, M.D. -- *internal medicine*

Kerry L. Greenwood, M.D. -- *internal medicine*
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Takeshi Seto, M.D. -- *internal medicine*
Thomas J. Whittaker, M.D. -- *internal medicine*
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In Memoriam

■ **William H. Ames, M.D.**, died May 14, 1991 at the age of 70. Dr. Ames, an internal medicine specialist, practiced medicine in St. Joseph for many years. He obtained his medical degree at the University of Louisville School of Medicine in 1945. Dr. Ames was a member of the Buchanan County Medical Society.

■ **Ronald F. Elkins, M.D.**, died April 6, 1991 at the age of 88. Dr. Elkins, a colon and rectal surgery specialist, practiced medicine in Springfield. He obtained his medical degree at Washington University School of Medicine in 1928. Dr. Elkins was a member of the Greene County Medical Society.

■ **Thomas E. Ferrell, M.D.**, died March 31, 1991 at the age of 87. Dr. Ferrell, a surgeon, practiced medicine in Springfield for many years, beginning in 1932. In 1946, he and Robert D. Duncan formed the Ferrell-Duncan Clinic, which has grown to a staff of 42 physicians and more than 100 specialized technicians. He was also interested in politics, serving as the Missouri state chairman of the Barry Goldwater for President Committee, and in 1968 was a delegate to the Republican National Convention in Miami, Florida. He obtained his medical degree at the University of Colorado School of Medicine in 1930. Dr. Ferrell was a member of the Greene County Medical Society.

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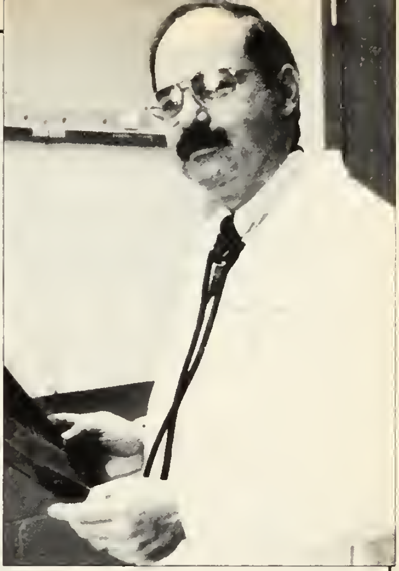
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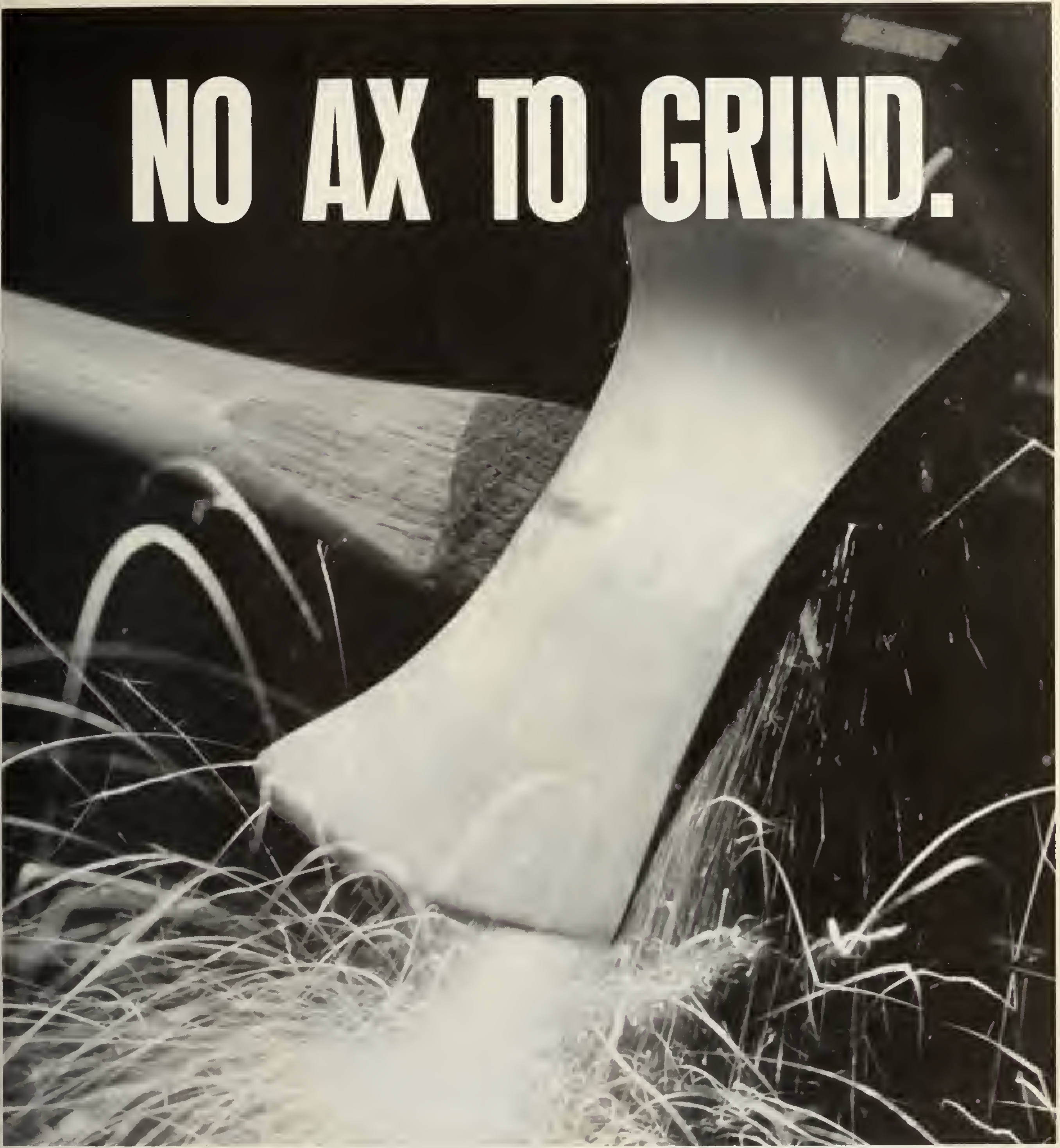

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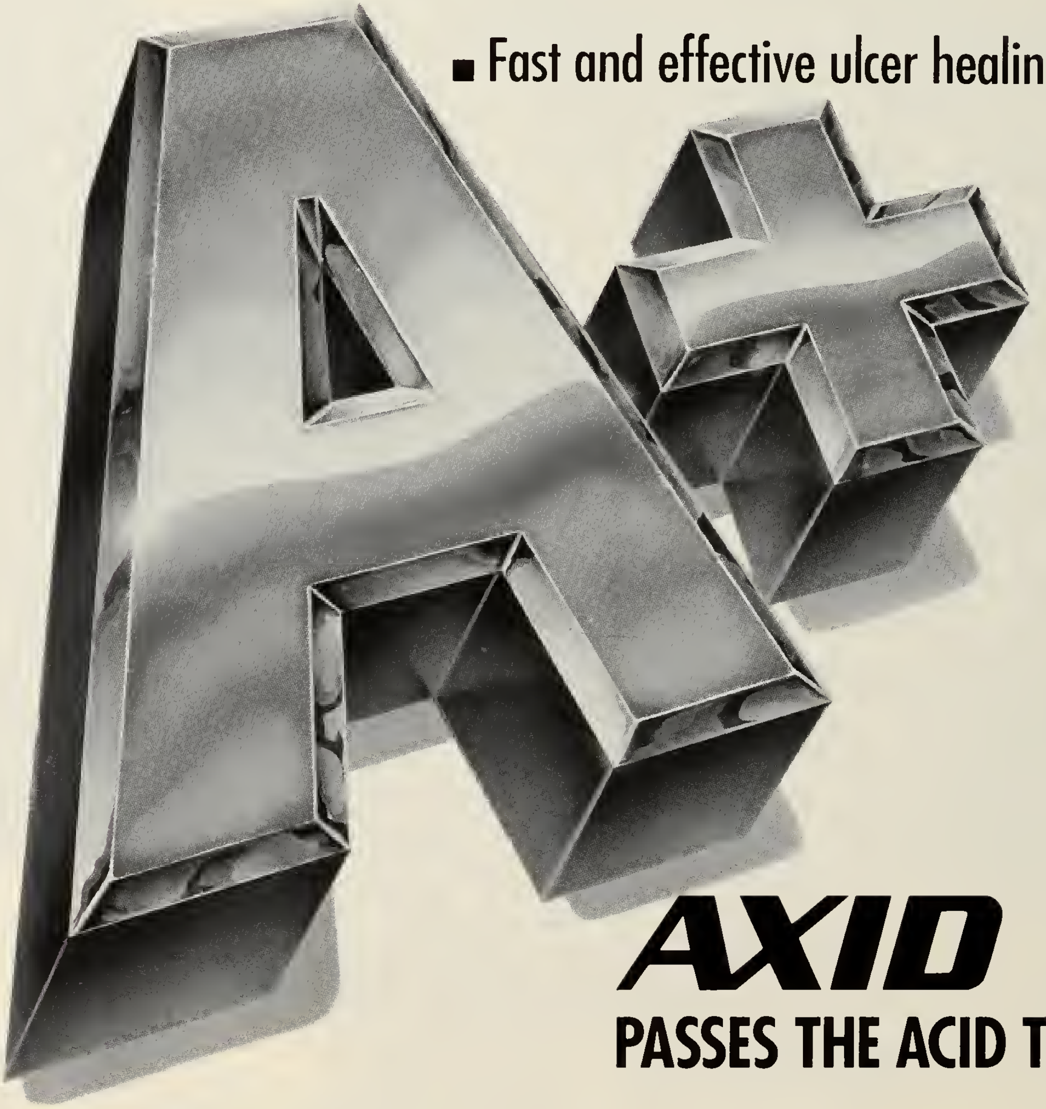

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See adjacent page for references and brief summary of prescribing information.

NZ-2943-B-149347

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AXID® (nizatidine capsules)

Brief Summary. Consult the package insert for complete prescribing information.

Indications and Usage: 1. *Active duodenal ulcer*—for up to 8 weeks of treatment. Most patients heal within 4 weeks.

2. *Maintenance therapy*—for healed duodenal ulcer patients at a reduced dosage of 150 mg h.s. The consequences of therapy with Axid for longer than 1 year are not known.

Contraindications: Known hypersensitivity to the drug. Because cross sensitivity in this class of compounds has been observed, H_2-receptor antagonists, including Axid, should not be administered to patients with a history of hypersensitivity to other H_2-receptor antagonists.

Precautions: *General*—1. Symptomatic response to nizatidine therapy does not preclude the presence of gastric malignancy.

2. Dosage should be reduced in patients with moderate to severe renal insufficiency.

3. In patients with normal renal function and uncomplicated hepatic dysfunction, the disposition of nizatidine is similar to that in normal subjects.

Laboratory Tests—False-positive tests for urobilinogen with Multistix® may occur during therapy.

Drug Interactions—No interactions have been observed with theophylline, chlordiazepoxide, lorazepam, lidocaine, phenytoin, and warfarin. Axid does not inhibit the cytochrome P-450 enzyme system; therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin daily, increased serum salicylate levels were seen when nizatidine, 150 mg b.i.d., was administered concurrently.

Carcinogenesis, Mutagenesis, Impairment of Fertility—A 2-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a 2-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high-dose males as compared with placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups. The rate of hepatic carcinoma in the high-dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement as compared with concurrent controls and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given an excessive and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery are not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, mouse lymphoma assay, chromosome aberration tests, and a micronucleus test.

In a 2-generation, perinatal and postnatal fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy—Teratogenic Effects—Pregnancy Category C—Oral reproduction studies in rats at doses up to 300 times the human dose and in Dutch Belted rabbits at doses up to 55 times the human dose revealed no evidence of impaired fertility or teratogenic effect; but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in 1 fetus, and at 50 mg/kg, it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in 1 fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers—Studies in lactating women have shown that 0.1% of an oral dose is secreted in human milk in proportion to plasma concentrations. Because of growth depression in pups reared by treated lactating rats, a decision should be made whether to discontinue nursing or the drug, taking into account the importance of the drug to the mother.

Pediatric Use—Safety and effectiveness in children have not been established.

Use in Elderly Patients—Healing rates in elderly patients were similar to those in younger age groups as were the rates of adverse events and laboratory test abnormalities. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Clinical trials of varying durations included almost 5,000 patients. Among the more common adverse events in domestic placebo-controlled trials of over 1,900 nizatidine patients and over 1,300 on placebo, sweating (1% vs 0.2%), urticaria (0.5% vs <0.01%), and somnolence (2.4% vs 1.3%) were significantly more common with nizatidine. It was not possible to determine whether a variety of less common events were due to the drug.

Hepatic—Hepatocellular injury (elevated liver enzyme tests or alkaline phosphatase) possibly or probably related to nizatidine occurred in some patients. In some cases, there was marked elevation (>500 IU/L) in SGOT or SGPT and, in a single instance, SGPT was >2,000 IU/L. The incidence of elevated liver enzymes overall and elevations of up to 3 times the upper limit of normal, however, did not significantly differ from that in placebo patients. All abnormalities were reversible after discontinuation of Axid. Since market introduction, hepatitis and jaundice have been reported. Rare cases of cholestatic or mixed hepatocellular and cholestatic injury with jaundice have been reported with reversal of the abnormalities after discontinuation of Axid.

Cardiovascular—In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in 2 individuals administered Axid and in 3 untreated subjects.

CNS—Rare cases of reversible mental confusion have been reported.

Endocrine—Clinical pharmacology studies and controlled clinical trials showed no evidence of antiandrogenic activity due to nizatidine. Impotence and decreased libido were reported with equal frequency by patients on nizatidine and those on placebo. Gynecomastia has been reported rarely.

Hematologic—Fatal thrombocytopenia was reported in a patient treated with nizatidine and another H_2-receptor antagonist. This patient had previously experienced thrombocytopenia while taking other drugs. Rare cases of thrombocytopenic purpura have been reported.

Integumental—Sweating and urticaria were reported significantly more frequently in nizatidine- than in placebo-treated patients. Rash and exfoliative dermatitis were also reported.

Hypersensitivity—As with other H_2-receptor antagonists, rare cases of anaphylaxis following nizatidine administration have been reported. Rare episodes of hypersensitivity reactions (eg, bronchospasm, laryngeal edema, rash, and eosinophilia) have been reported.

Other—Hyperuricemia unassociated with gout or nephrolithiasis was reported. Eosinophilia, fever, and nausea related to nizatidine have been reported.

Overdosage: Overdoses of Axid have been reported rarely. If overdosage occurs, activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. Renal dialysis does not substantially increase clearance of nizatidine due to its large volume of distribution.

PV 2091 AMP
[091190]

References

1. Data on file, Lilly Research Laboratories
2. *Scand J Gastroenterol.* 1987,22(suppl 136):61-70
3. *Scand J Gastroenterol.* 1987,22(suppl 136):47-55
4. *Am J Gastroenterol* 1989,84 769-774

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MONETAMED PROFILE

THOMAS P. DOYLE, M.D.

HOME: Springfield, Missouri.

AGE: 36.

SPECIALTY: Orthopedic Surgery.

MEDICAL COLLEGE: University of Missouri, 1978

PRACTICE: "I recently purchased an established but declining sole practitioner office from a retiring physician. It's a risk, but they say that great deeds are usually wrought at great risk."

TYPICAL DAY: "Let the horses out of the corral at dawn and maybe even go for a ride. Then, it's surgery if scheduled and a day of torn ligaments and sprained ankles. The evening finds me on the sidelines of one of our high school sports teams."

HOBBIES: Horseback riding and golf. "If I combined activities, would it be polo?"

LAST BOOK READ: Missouri: Images of Nature, photographed by Charles Gurche.

LATEST ACCOMPLISHMENT: "Testing a protective knee pad I'm developing for use by football players."

QUOTE: "Physicians are being deterred from trying new procedures and therapies in patient care. We need to cut the chains and encourage individual innovation."

PROFILE: Independent and open-minded. "Living in the country, I don't feel hampered by social convention. I can work on new ways of doing things."

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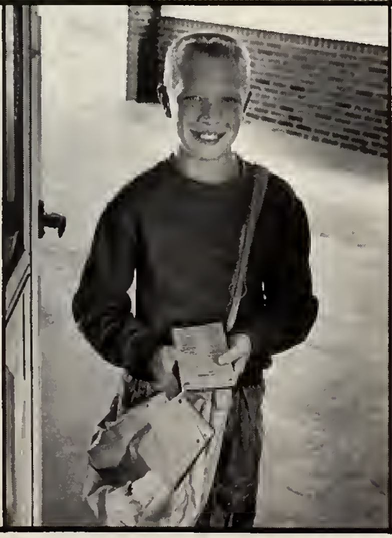

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1991 Charity Care Program Update

The Physicians' Charity Care Program began in January 1990. The Program asks that physicians document the number of encounters and number of hours of hands-on charity medical care given to indigent and Medicaid patients. The following is a list of the Missouri physicians who provided at least 50 hours of charity care during 1990-1991.

Thomas Aceto, Jr.
Eugene Adelmann
Gaudencio Agasino
Janet Akremi
Osias Almiron
Paul Anderson
George Anstey
Ali Arbab
Neva Arribas
Phillip Asaro
Jennifer Ashby
Keith Ashcraft
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Vatche Ayvazian
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Harry Brady
Arnold Brody
Robert Brookes
Kenneth Buchwach
Steven Buie
Mark Bult
Max Burgdorf
Jordan Burkey
Donald Bussmann
Robert Carolla
Nancy Ceaser
Murray Chinsky
M.H. Choudhury
Fred Chu
Gerhard Cibis
Michael Clarke
William Clary
Bradford Clayton
John Clouse
R.M. Collison
George Colom
Columbia Orthopaedic Group
Ruth Comens
Francis Corcoran
Robert Corday
Mark Cotner
Jeffrey Couch
Reno Covale
John Cox
W. W. Cox
Patrick Coyne
Thomas Cradock
Richard Craig
Martin Crow
William Cunningham
Richard Danis
Philip Dean
Michael DePriest
Jacquelyn Dilworth
James Dinkins
Q. Michael Ditmore
Thomas Donovan
Lawrence Drahota
Gerald Duling
Daniel Durie
Curtis Dyer
Gary Dyer
Joseph Eades
Robert Engelhardt
Larry Evans, Jr.
Family Medical Care Center, *Springfield*
Barry Farber
Mark Feldman
Mark Fernandez
Joseph Finnegan
A. Fiore
Joseph Fisher
Michele Flicker
Mariano Floro
J.C. Freeman
Thomas Froehlich
Jon Gaffney
Albert Garade
William Gedney
Thomas Geraghty
Jerome Gilden
T.J. Glenn
Jonathan Gold
Samuel Golden
Mark Gordon
M. Gilbert Grand
Ruth Grant
William Grant
John Gregory
Ted Groshong
E.P. Gutek
Joseph Hanaway
Lily Hanes
Hannibal Clinic
M.S. Hari
Thomas Hartnett
William Haynie
F.T. H'Doubler, Jr.
Ronald Hill
Joseph Hills
John Hoehn
Ronald Hoffman
William Hoffman
Michael Hoghes
Thomas Holder
John Holds
Roger Hood
Gary Hoos
Phillip Hornbostel
Alexander Hover
Han Hulstra
James Humphrey
Ramiro Icaza
Victor Isaacs
Mark Jary
Joshua Jensen
Robert Jones
Michael Karl
R. Karsh
Ruth Kauffman
James Keating
Grace Ketterman
James Key
A.G. Khan
Roger Khouri
Izak Kielmovitch
Charles Kilo
Michael Knudsen
Mike Kozninski
Paul Kratz
Jerold Kreisman

(more)

1990-1991 Charity Care Program Update *(continued)*

Rolf Krojanker
Lawrence Kuhn
Robert Laatsch
Lawrence Lampton
Philip LeFebre
Fransiska Lee
Gerald Lee
Gary Leifer
Gene Leroux
Carleton Lindgren
Daniel Lischwe
Orlyn Lockard, Jr.
Richard Loeb
Richard Lord
Michael Luzecky
Thomas Lynch
Sivaprasad Madduri
Troy Major, II
Mignon Makas
John Mantovani
Francis Maple
Diosdado Maranan
David Marrs
F. J. Marston
Larry Marti
Charles Mauldin
Kathy Maupin
Michael McDonald
Gene McFadden
Lois McKinley
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(More names to be published in September Missouri Medicine.)

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Most regular features of Missouri Medicine have been eliminated for this issue only to focus on information used daily by Missouri physicians. Reviewing the Contents page, you will see the following information included in this issue. Here we list a brief explanation of each section:

MSMA Officers, AMA Delegates and Alternates, MSMA Councilors and Vice Councilors — This photo feature helps you to identify the leaders and representatives of MSMA.

Code Number for Component Medical Societies —Every MSMA member is listed in two rosters in this issue: alphabetically and by component medical society. In the alphabetical listing, the number following the physician's name corresponds with the numerical heading where the second listing is found. For example, a physician practicing in Columbia would have the code 026 following his alphabetical listing to show that he/she is featured in the Boone County listing in the second roster section. This code number chart also shows the page number of each component medical society section.

Designated Specialty Codes — These abbreviations follow a physician's name to show the medical specialty.

Councilor Districts and Counties in Each District —The map shows the geographical divisions for each MSMA Councilor District. The names of the Councilors for those districts and the counties in their area are listed.

Guide to Component Medical Societies — An alphabetical list of Missouri communities and their corresponding component medical society.

MSMA Committee and Commissions — A listing of the members of each committee and commission for 1991-92.

Directory of Medical Specialty Organizations — A list of each state specialty organization, the president's name and address, and meeting information, if available.

Directory of Metropolitan Specialty Organizations — A list of each metropolitan specialty organization, the president's name and address, and meeting information, if available.

Insurance Options For MSMA Members — Type of coverage, underwriter and administrator is listed for each plan.

Missouri Volunteer Health Agencies — These groups provide assistance in the form of free or specialized equipment, rehabilitation training, counseling, specialized care, or information. These are listed for members' referral purposes.

Alphabetical Roster — All members are listed by their last name followed by the code number and the name of their component medical society.

Component Society Roster — Sectioned according to component medical society, the physician's name, address, telephone number and medical specialty code appear here.

Component Society Executives — A listing of the directors of each component society with a full-time staff, along with the address and phone number of the society's office. ■

The Missouri State Medical Association
1991-1992

The Mission of the Missouri State Medical Association is to serve its members through promotion of the science and art of medicine, protection of the health of the public, and betterment of the medical profession in Missouri.

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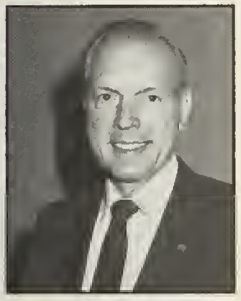

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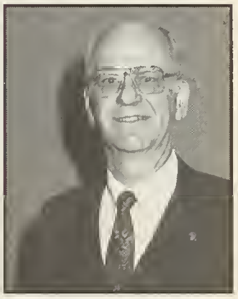

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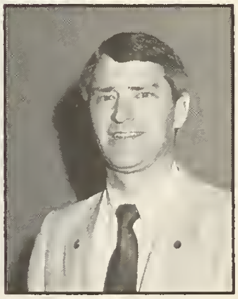

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Kansas City, MO 64108
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314/364-6051

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Joplin, MO 64804
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Directory of Medical Specialty Organizations

Any specialty group not listed here may send the name of the group's president and the time, date and place of the group's next meeting to: **Medical Specialty Listing,** *MISSOURI MEDICINE*, P.O. Box 1028, Jefferson City, MO 65102.
*** The 134th MSMA Annual Convention will be April 9-12, 1992 at the Adam's Mark Hotel in St. Louis, Missouri.**

Specialty	President	Next Meeting
Missouri State Allergy Association	**Michele E. Kemp, M.D.** 1585 Woodlake Drive, #201 Chesterfield, MO 63017	*MSMA Annual Convention St. Louis, MO
Missouri Society of Anesthesiologists	**Jack M. Bagby, M.D.** 1900 South National, #1800 Springfield, MO 65804	*MSMA Annual Convention St. Louis, MO
Missouri Dermatological Society, Inc.	**Thelda Kenstenbaum, M.D.** University of Kansas Medical Center Room 4023-C Building 39th & Rainbow Kansa City, KS 66103	*MSMA Annual Convention St. Louis, MO
Missouri Chapter, American College Emergency Physicians	**Michael Szewczyk, M.D.** 910 West Broadway Columbia, MO 65203	July 31, 1991 Tan-Tar-A Lake of the Ozarks, MO
Missouri Academy of Family Physicians	**Mark C. Kasten, M.D.** 69 Doctors' Park Cape Girardeau, MO 63701	TBA
Missouri Society of Internal Medicine	**D. Douglas Westoff, M.D.** 1505 Southwest Blvd. Jefferson City, MO 65101	TBA
Missouri State Neurosurgical Society	**Robert A. Morantz, M.D.** Research Medical Office Tower T411, 6420 Prospect Kansas City, MO 64132	*MSMA Annual Convention St. Louis, MO
Missouri OB/GYN Society	**George J. Fuchs, M.D.** 201 W. Brandon Road Columbia, MO 65201	TBA

Missouri Ophthalmological Society	**Patrick K. Price, M.D.** 206 NW Mock, Suite 200 Blue Springs, MO 64014	TBA
Missouri State Orthopaedic Association	**Joseph M. Sudekem, M.D.** 621 S. New Ballas Road Suite 297C St. Louis, MO 63141	MSOA Annual Convention June 25-28, 1992 Lodge of the Four Seasons Lake Ozark, MO
Missouri Society of Otolaryngology-Head and Neck Surgery	**J. Regan Thomas, M.D.** 3009 N. Ballas Road Suite 269 St. Louis, MO 63131	TBA
Missouri Society of Pathologists	**Robert L. Breckenridge, M.D.** 6501 E. Commerce Avenue Suite #101 Kansas City, MO 64120	TBA
Missouri Chapter, American Academy of Pediatrics	**Robert Edmonds, M.D.** 1718 S. Ingram Sedalia, MO 65301	TBA
Missouri Association of Plastic & Reconstructive Surgeons	**Richard Heimburger, M.D.** 401 Locust Street, #300 Columbia, MO 65201	*MSMA Annual Convention St. Louis, MO
Missouri Psychiatric Association	**Stuart Munro, M.D.** Western Missouri Psychiatric Society 10319 Sagamore Road Leawood, KS 66206	*MSMA Annual Convention St. Louis, MO
Missouri Radiology Society	**Bruce Walz, M.D.** St. Anthony's Medical Center 10010 Kennerly Road St. Louis, MO 63128	*MSMA Annual Convention St. Louis, MO
Missouri Chapter of American College of Surgeons	**Donald G. Sessions, M.D., FACS** 4911 Barnes Hospital Plaza St. Louis, MO 63110	June 19-21, 1992 Lodge of the Four Seasons Lake Ozark, MO
Missouri State Surgical Society	**Edward Andres, III, M.D.** 1314 North 36th Street St. Joseph, MO 64506	*MSMA Annual Convention St. Louis, MO
Missouri Thoracic Society	**Dennis R. Pyszcyynski, M.D.** UMKC School of Medicine 2411 Holmes Street Kansas City, MO 63108	October 4-5, 1991 Tan-Tar-A Lake of the Ozarks, MO
Missouri Society of Urologists	**Micheal J. Chehval, M.D.** 641 S. New Ballas Road St. Louis, MO 63141	TBA

Metropolitan Specialty Organizations

Listed here are medical specialty groups located in Missouri's metropolitan areas. The listings are organized by city with the name of the current president or contact person, their address and phone number plus the organization's meeting schedule, if available at press time. Please note that any organization not listed below may submit their standard information for publication to: Metropolitan Specialty Organizations, ***MISSOURI MEDICINE***, P.O. Box 1028, Jefferson City, MO 65102.

Columbia

Mid-Missouri Pathology Society
Ann Havey, M.D., contact person
Health Sciences Center
Columbia, MO 65212
314/882-8154

Central Missouri Psychiatric Society
Stephen Soltys, M.D., president
Mid-Missouri Mental Health
3 Hospital Drive
Columbia, MO 65201
314/449-2511
Quarterly meetings

Missouri Chapter of American College of Pediatrics
Robert Edmonds, M.D., president
111B East Walnut, Columbia 65203
314/874-8985

American College of International Physicians, Missouri Chapter
Ramesh Khanna, M.D., president
2514 Ridgefield Road, Columbia 65203
314/882-7991

Kansas City

Greater Kansas City Allergy Association
Jay M. Aggarwal, M.D., president
6225 Raytown Trafficway
Raytown, MO 64133
816/737-3811
Meetings are quarterly; one annual meeting

Kansas City Society of Anesthesiologists
Stephen A. McCray, M.D., president
Suite 200
320 Armour Road
Kansas City, MO 64116
816/221-5050

Kansas City Dermatologic Society
David C. Rada, M.D., president
Suite 728, 4320 Wornall Road
Kansas City, MO 64111
816/561-3641
Meets 3rd Wednesdays except July, March & December

American Academy of Family Physicians
Lawrence A. Rues, M.D., president
Goppert Family Care Center, 6601 Rockhill Road
Kansas City, MO 64131
816/276-7600

Kansas City Gynecological Society
Richard H. Sinclair, M.D., president
Suite 320, 10600 Quivira Road
Overland Park, KS 66215
913/541-3200
Meets 3rd Thursday of Jan, March, May, Sept & Nov

Greater Kansas City Society of Internists
John Dunlap, M.D., president
11105 Cedar, Overland Park, KS 66211
913/491-6633
Meets in Feb., Apr., Sept., Nov.

Great Plains Occupational & Environmental Medicine
Commander Richard J. Miller, M.D., president
Room 907, 601 E. 12th Street
Kansas City, MO 64106
816/426-3433

Kansas City Society of Ophthalmology & Otolaryngology
William F. Case, M.D., president
Suite 416, 1010 Carondelet Drive
Kansas City, MO 64114
816/942-8555

Kansas City Orthopedic Society
Ken L. Wertzberger, M.D., president
1112 West 6th Street
Lawrence, KS 66044

Kansas City Society of Pathologists
Dan A. Waxman, M.D., president
Community Blood Center, 4040 Main Street
Kansas City, MO 64111
816/753-4040
Meets 1st Wednesday Sept. - May

Greater Kansas City Pediatric Society
Joachim R. Brill, M.D., president
30 Westwoods Drive, Liberty, MO 64060
816/781-7979
Meets monthly on 4th Wednesday

Plastic Surgery Society of Kansas City
Thomas E. Geraghty, M.D., president
Suite 204, 4444 N. Bellview
Kansas City, MO 64116
Meets Jan, Mar, May, Sept and Nov

Western Missouri Psychiatric Society
Jack Edmisten, M.D., president
P.O. Box 1570, Independence, MO 64055
816/346-9100
Meets quarterly

Greater Kansas City Radiological Society
C.H. Joseph Chang, M.D., president
University of Kansas Medical Center
Dept. of Diagnostic Radiology, 39th & Rainbow Blvd.
Kansas City, KS 66103
913/588-6807
Meets 2nd Wednesdays, Jan-April & Sept, Oct and Nov

Kansas City Surgical Society
Thomas L. Taylor, M.D., president
8901 West 74th Street, Suite 34
Shawnee Mission, KS 66204
913/362-9444
Meets Quarterly, 3rd Wednesday

Kansas City Urological Society
Robert L. Elkins, M.D., president
6650 Troost, Suite 206
Kansas City, MO 64131
816/333-5433
Meets 3rd Wednesday Sept-May

St. Louis

St. Louis Society of Anesthesiologists
Alex K. Mills, M.D., president
3015 N. Ballas Road, St. Louis, MO 63131
314/432-1212

St. Louis Cardiac Club
Martin Schwarze, M.D., president
3660 Vista Avenue, St. Louis, MO 63110
314/577-6190

St. Louis Society of Colon and Rectal Surgery
Francis J. Burns, M.D., president
216 S. Kingshighway Blvd., St. Louis, MO 63110
314/962-4511

St. Louis Dermatological Society
Lawrence E. Samuels, M.D., president
7511 Big Bend Blvd., St. Louis, MO 63119
314/962-4511

The St. Louis Ear, Nose and Throat Club
William P. Lampros, M.D., president
4911 Barnes Hospital Plaza, St. Louis, MO 63110
314/962-4511

St. Louis Academy of Family Physicians
Bartolome C. Kairuz, M.D., president
615 S. New Ballas Road, St. Louis, MO 63141
314/569-6010

St. Louis Gastrointestinal Endoscopy Society
Burton A. Shatz, M.D., president
3009 N. Ballas Road, St. Louis, MO 63141
314/569-6010

St. Louis Gynecological Society
Octavio R. Chirino, M.D., president
9147 Watson Road, St. Louis, MO 63126
314/963-1040

St. Louis Society of Internal Medicine
John M. Cary, M.D., president
222 S. Woods Mill Road, Suite 750 N, St. Louis, MO 63017
314/275-8600

St. Louis Society of Medical Oncology
Paul J. Petruska, M.D., president
3009 N. Ballas Road, St. Louis, MO 63131
314/432-1111

St. Louis Society for Neurological Sciences
John B. Selhorst, M.D., president
6400 Clayton Road, St. Louis, MO 63117
314/781-0024

St. Louis Ophthalmological Society
Stephen R. Waltmann, M.D., president
1245 Graham Road, St. Louis, MO 63031
314/837-3667

St. Louis Orthopedic Society
Clayton Perry, M.D., president
621 S. New Ballas, St. Louis, MO 63141
314/569-6630

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Daphne DeMello, M.D., president
615 S. New Ballas Rd., St. Louis, MO 63141
314/569-6120

St. Louis Pediatric Society
Elliot Farberman, M.D., president
12303 DePaul Drive, St. Louis, MO 63044
314/344-6000

St. Louis Society of Physical Medicine & Rehabilitation
Franz U. Steinberg, M.D., president
12303 DePaul Drive, St. Louis, MO 63044
314/454-6087

St. Louis Area Society of Plastic Surgeons
Meredith J. Payne, M.D., president
222 S. Woods Mill Road, Chesterfield, MO 63017
314/878-7770

Eastern Missouri Psychiatric Society
Lori DeRosear, D.O., president
41034 S. Brentwood Blvd., St. Louis, MO 63117
314/726-6610

Greater St. Louis Society of Radiologists
Bruce Walz, M.D., president
6420 Clayton Road, St. Louis, MO 63117
314/768-8250

St. Louis Rheumatology Association
Robert E. Kuhlman, M.D., president
6651 Chippewa, St. Louis, MO 63109
314/644-4411

St. Louis Surgical Society
Donald Judd, M.D., president
621 S. New Ballas Road, St. Louis, MO 63141
314/567-9930

St. Louis Thoracic Surgical Society
John P. Marbarger, M.D., president
3635 Vista Ave. at Grand , St. Louis, MO 63110
314/567-9930

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YOCON®
YOHIMBINE HCl

Description: Yohimbine is a 3a-15a-20B-17a-hydroxy Yohimbine-16a-carboxylic acid methyl ester. The alkaloid is found in Rubaceae and related trees. Also in Rauwolfia Serpentina (L) Benth. Yohimbine is an indolalkylamine alkaloid with chemical similarity to reserpine. It is a crystalline powder, odorless. Each compressed tablet contains (1/12 gr.) 5.4 mg of Yohimbine Hydrochloride.

Action: Yohimbine blocks presynaptic alpha-2 adrenergic receptors. Its action on peripheral blood vessels resembles that of reserpine, though it is weaker and of short duration. Yohimbine's peripheral autonomic nervous system effect is to increase parasympathetic (cholinergic) and decrease sympathetic (adrenergic) activity. It is to be noted that in male sexual performance, erection is linked to cholinergic activity and to alpha-2 adrenergic blockade which may theoretically result in increased penile inflow, decreased penile outflow or both.

Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalmic centers and release of posterior pituitary hormone.

Reportedly, Yohimbine exerts no significant influence on cardiac stimulation and other effects mediated by B-adrenergic receptors, its effect on blood pressure, if any, would be to lower it; however no adequate studies are at hand to quantitate this effect in terms of Yohimbine dosage.

Indications: Yocon® is indicated as a sympathicolytic and mydriatric. It may have activity as an aphrodisiac.

Contraindications: Renal diseases, and patient's sensitive to the drug. In view of the limited and inadequate information at hand, no precise tabulation can be offered of additional contraindications.

Warning: Generally, this drug is not proposed for use in females and certainly must not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer history. Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general.

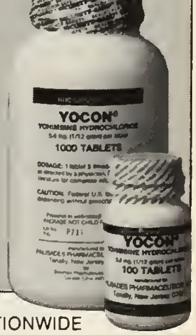
Adverse Reactions: Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug.[1,2] Also dizziness, headache, skin flushing reported when used orally.[1,3]

Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.[1,3,4] 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to ½ tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.[3]

How Supplied: Oral tablets of Yocon® 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

References:
1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

Rev. 1/85



AVAILABLE AT PHARMACIES NATIONWIDE

PALISADES PHARMACEUTICALS, INC.
219 County Road
Tenafly, New Jersey 07670
(201) 569-8502
1-800-237-9083

Missouri Volunteer Health Agencies

Patients of MSMA members are eligible, in some instances, to receive assistance from various volunteer health agencies in the state. Assistance may be in the form of free or subsidized, specialized care, or information. In an effort to assist MSMA members in attaining assistance for their patients, the following list of Missouri volunteer health agencies has been compiled. In some cases, a statewide organization is listed. In instances in which an organization is limited to a certain portion of the state, several organizations may be listed under one heading.

Amyotrophic Lateral Sclerosis

Contact your local Muscular Dystrophy Association

Arthritis

Arthritis Foundation, Eastern Missouri Chapter
7315 Manchester, St. Louis 63143
314-644-3488

Arthritis Foundation, Western Missouri-Greater Kansas City Chapter
8301 State Line, Suite 200, Kansas City 64114
816-361-7002

Asthma and Allergy

Asthma and Allergy Foundation of America, St. Louis Chapter
222 South Central, Suite 600, St. Louis 63105
314-726-6866

Birth Defects

March of Dimes, Northern Missouri Chapter
1310 Business 63 South, Columbia 65201
314-449-0573

Blood Transfusion and Tissue Bank

Missouri/Illinois Regional Blood Services
4050 Lindell, St. Louis 63108
314-658-2000

Cancer

American Cancer Society, Missouri Division, Inc.
P.O. Box 1066, 3322 American Ave.,
Jefferson City 65102
314-893-4800 or 1-800-ACS-2345

Cerebral Palsy

United Cerebral Palsy Association of Missouri
925 South Country Club Drive, Suite A-1
Jefferson City 65109
314-893-5454

Charcot-Marie-Tooth

Contact your local Muscular Dystrophy Association

Cystic Fibrosis

Cystic Fibrosis Foundation, Gateway Chapter
7730 Carondelet, St. Louis 63105
314-721-2490

Cystic Fibrosis Foundation,
Heart of America Chapter
8080 Ward Parkway, #250, Kansas City 64114
816-363-5636

Diabetes

American Diabetes Association, Columbia Region
206 Austin, P.O. Box 11
Columbia 65205
314-443-8611

American Diabetes Association,
Heart of America Region
9201 Ward Parkway, Kansas City 64114
816-361-3361

American Diabetes Association,
Missouri Affiliate, Inc.
213 Adams, Suite 201, Jefferson City 65101
314-636-5552

American Diabetes Association, Ozark Region
Cox Medical Center North
1423 North Jefferson, J-200, Springfield 65802
417-864-5091

American Diabetes Association
Missouri Affiliate Inc./St. Louis Region
1780 S. Brentwood Blvd., St. Louis 63146
314/968-3196

Epilepsy

Epilepsy Federation of the St. Louis Region
7305 Manchester, St. Louis 63143
314-645-6969

Epilepsy Foundation, Heart of America Region
4949 Rockhill Rd., Kansas City 64110
816-276-8940

Friedrich's Ataxia

Contact your local Muscular Dystrophy Association

General Health

HealthLine, Boone Hospital Center,
1600 E. Broadway, Columbia 65201
1-800-872-9008 or 314-875-6400

Heart

American Heart Association, Missouri Affiliate, Inc.
P.O. Box Q, Columbia 65205
314-446-3000 or 1-800-323-7883

Hemophilia

Bi-State Hemophilia Association
3127 A South Grant, St. Louis 63118
314-771-6080

Interstitial Cystitis

Missouri State Coordinator for Interstitial Cystitis
Miss Betty J. Hinken, 602 S. Stella,
Harrisonville 64701
816-884-4755

Kidney

National Kidney Foundation of
Eastern Missouri and Metro East, Inc.
3117 S. Big Bend, Suite 200, St. Louis 63143
1-800-727-0240 or 314-647-9585

Lungs

American Lung Association, Springfield Branch
2053 S. Waverly, Springfield 65804
417-883-7177 or FAX: 417-883-7026

American Lung Association, Central Missouri Branch
P.O. Box 1321, Columbia 65205-1321
314-874-2616 or FAX: 314-443-LUNG

American Lung Association of Eastern Missouri
1118 Hampton Ave., St. Louis 63139-3196
314-645-5505 or 1-800-467-5864
FAX: 314-645-7128

American Lung Association of Western Missouri
2007 Broadway, Kansas City 64108
816-842-5242 or FAX: 816-842-5470

American Lung Association, Southeast Missouri Branch
P.O. Box 513, Cape Girardeau 63701
314-334-4007 or FAX: 314-334-0581

Multiple Sclerosis

Multiple Sclerosis Society, Gateway Area Chapter
915 Olive St., Suite 815, St. Louis 63101
314-241-8285

Multiple Sclerosis Society, Mid-America Chapter
P.O. Box 2292, Shawnee Mission, KS 66201
1-800-745-3148 or 913-432-3926

Multiple Sclerosis Society, Mid-Missouri Branch
1206 Business Loop 70 West,
Suite E, Columbia 65201
314-875-6767 or 1-800-745-6148

Multiple Sclerosis Society, St. Joseph
Heartland Hospital West, 801 Faraon,
Rooms 237 &238, St. Joseph 64501
816-364-6290 or 1-800-745-6148

Multiple Sclerosis Society, Ozark Branch
1675-I E. Seminole, Springfield 65804
417-882-8128 or 1-800-745-4148

Multiple Sclerosis Society, Joplin Branch
1823-D E. 20th, Joplin 64804
417/622-2449 or 1-800-745-8148

Muscular Dystrophy

Muscular Dystrophy Association,
Central Missouri Chapter
1301 Vandiver, Suite U, Columbia 65202
314-442-5154

Muscular Dystrophy Association, Inc.
11520 St. Charles Rock Rd., Bridgeton 63034
314-298-9516

Muscular Dystrophy Association, Inc.,
Greater Ozarks Chapter
435 S. Union, Suite K, Springfield 65802-2657
417-866-5117

Muscular Dystrophy Association, Inc.,
Missouri Valley Chapter
301 E. Armour, Suite 305, Kansas City 64111
816-931-7750

Muscular Dystrophy Association, Inc.,
Mississippi Valley Chapter
1023 S. Big Bend Blvd., St. Louis 63117
314-644-2828

Muscular Dystrophy Association, Twin Rivers Chapter
354 Silver Springs Road, Cape Girardeau 63701
314-335-4400

Myasthenia Gravis

Myasthenia Gravis Foundation, Inc.,
Greater Kansas City Chapter
4949 Rockhill Rd., Kansas City 64110
816-276-8310
Also, contact your local Muscular Dystrophy office.

Myotonias

Contact your local Muscular Dystrophy Association

Neurofibromatosis

The National Neurofibromatosis Foundation, Inc.,
Missouri Chapter and Midwest Chapter
9769 St. Charles Rock Road, St. Louis 63114
314-428-1520

Red Cross

American Red Cross, Greater Kansas City Chapter
211 W. Armour, Kansas City 64111
816-931-8400

American Red Cross, Missouri/Illinois
Regional Blood Services
4050 Lindell Blvd., St. Louis 63108
314-658-2000

Associations for Retarded Citizens

Barry-Lawrence ARC
P.O. Box 244, Monett 65708
417-235-3596

Clay-Platte ARC
1805 Swift, North Kansas City 64116
816-421-6733

Gentry County ARC
P.O. Box 219, Albany 64402
816-726-4155

Greene County Association for Retarded Children, Inc.
Activities Ctr., 1501 East Pythian, Springfield 65802
417-864-7887

Joplin Area ARC
P.O. Box 1061, Joplin 64802
417-629-3020, ext. 288

St. Charles County ARC
P.O. Box 9634, 613 Westridge Drive
O'Fallon 63366
314-281-1903

Stoddard County ARC
1318 W. Grant, Dexter 63841
314-624-8525

Spinal Muscular Atrophy

Contact your local Muscular Dystrophy Association

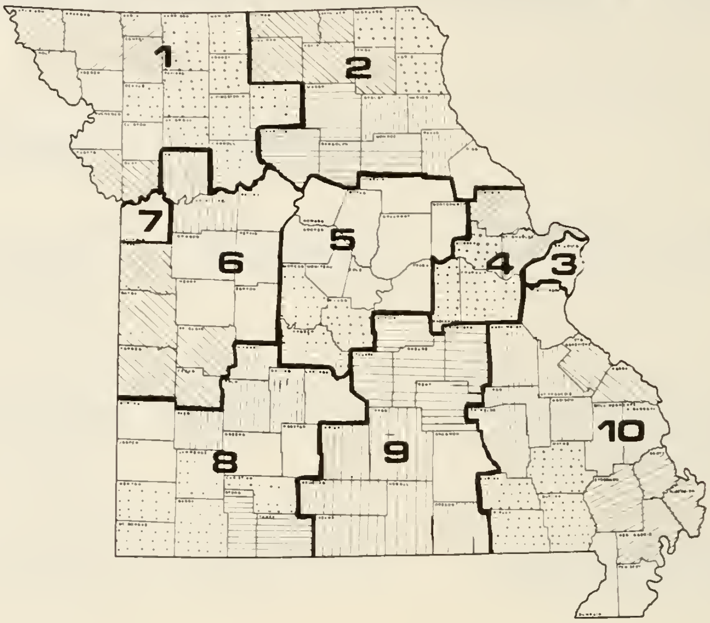
Sudden Infant Death Syndrome

SIDS Resources, Inc.
929 DeMun, St. Louis 63105
1-800-421-3511 (Missouri Toll Free)
314-862-3033 in St. Louis

Insurance Options For MSMA Members

Type of Coverage	Underwriter	Administrator
Professional Liability Insurance. Claims made coverage available from $200,00/$600,000 to $5/$7 million. Endorsed by MSMA.	MOMEDICO (Missouri Medical Insurance Company)	MOMEDICO 10795 Watson Road St. Louis, MO 63127 1-800-392-8039 in St. Louis 314/965-1003
Personal Disability Income. Benefits available up to $6,000 per month. Life-time accident/to age 65 sickness coverage. Residual disability benefit available with cost of living increase provision. An individual contract with special renewal guarantees.	Commercial Insurance Company of Newark, N.J.	Sedgwick James of Missouri, Inc. 700 Corporate Park Drive Suite 200 Clayton, MO 63105 314/863-7777
Overhead Expense Insurance. Benefits up to $100,000 per month. Optional 15-day or 30-day waiting periods after which payment begins from first day of disability and continues up to 2 years.	Commercial Insurance Company of Newark, N.J.	Sedgwick James of Missouri, Inc. (See above)
Accidental Death and Dismemberment. Up to $100,000 coverage. May include spouse, children and employees.	Commercial Insurance Company of Newark, N.J.	Sedgwick James of Missouri, Inc. (See above)
Hospital Indemnity Plan. $50 to $200 per day while hospitalized in addition to any other insurance. Family coverage available.	Commercial Insurance Company of Newark, N.J.	Sedgwick James of Missouri, Inc. (See above)
Individual Noncancelable Products. Personal, Office, Overhead,Buy/Sell products. Benefits available to members at a 15% discount.	UNUM Life Insurance Company, Portland, ME	Sedgwick James of Missouri, Inc. (See above)
Term Life Plan. Members and employees under age 60 may enroll for amounts up to $250,000. Spouses coverage, one half amount of member or employee, up to $100,000. Dependent children may be insured for $2,500.	Continental Assurance Company	Forrest T. Jones and Co., Inc. 3130 Broadway P.O. Box 418131 Kansas City, MO 64141 1-800-892-7272
Accidental Death/Dismemberment. $25,000 guaranteed up to $100,000.	Continental Casualty Company	Forrest T. Jones and Co., Inc. (See above)
Major Medical Plan. Pays up to a lifetime of $1,000,000. Deductibles of $200, $500, $1,000. Coverage available to members, employees and dependents, with survivor benefits. Extremely low cost policy.	Continental Casualty Company	Forrest T. Jones and Co., Inc. (See above)
The Dodson Plan. The Dodson Plan gives participating physicians the opportunity to earn yearly dividends, depending on claim costs. MSMA members received a 10% return of premium in 1990.	Casualty Reciprocal Exchange, Member of Dodson Group	Dodson Group 9201 State Line Road Kansas City, MO 64114 1-800-825-3760
Retirement and Financial Planning. Retirement services including investment advice, plan administration and IRS approved prototype plan documents. Financial planning including estate, retirement, investment, income tax and insurance analysis.	MonetaMed, A Moneta Group Program	Moneta Group, Inc. 700 Corporate Park Drive Suite 300 St. Louis, MO 63105 1-800-833-1301 in St. Louis 314/726-2300

Councilor Districts and Counties in Each District



DISTRICT	COUNCILOR	COUNTIES
FIRST	**Stephen Vilmer, M.D.,** *Shawnee Mission, KS*	Andrew, Atchison, Buchanan, Caldwell, Carroll, Clay, Clinton, Daviess, DeKalb, Gentry, Grundy, Harrison, Holt, Linn, Livingston, Mercer, Nodaway, Platte and Worth
SECOND	**Carl Kruse, M.D.,** *Palmyra*	Adair, Chariton, Clark, Knox, Lewis, Macon, Marion, Monroe, Pike, Putnam, Ralls, Randolph, Schuyler, Scotland, Shelby and Sullivan
THIRD	**Daniel O'Sullivan, M.D.,** *St. Louis* **Gordon M. Goldman, M.D.,** *St. Louis* **Arturo Montes, M.D.,** *Florissant* **Frederick D. Peterson, M.D.,** *St. Louis* **Robert N. Miller, M.D.,** *St. Louis* **Meredith Payne, M.D.,** *Chesterfield*	St. Louis County and City
FOURTH	**Sammy L. Farrell, M.D.,** *Washington*	Franklin, Gasconade, Lincoln, St. Charles and Warren
FIFTH	**Ruth Kauffman, M.D.,** *Versailles*	Audrain, Boone, Callaway, Camden, Cole, Cooper, Howard, Miller, Moniteau, Montgomery, Morgan and Osage*
SIXTH	**A. J. Campbell, M.D.,** *Sedalia*	Bates, Benton,* Cass, Cedar, Henry, Johnson, Lafayette, Pettis, Ray, St. Clair, Saline and Vernon
SEVENTH	**Frederick W. Hahn, M.D.,** *Kansas City* **Robert T. Gibbons, Jr., M.D.,** *Overland Park, KS* **William Dorzab, M.D.,** *Kansas City* **Steven Buie, M.D.,** *Lee's Summit*	Jackson
EIGHTH	**David W. Hall, M.D.,** *Rogersville* **Duane Hellam, M.D.,** *Springfield*	Barry, Barton, Christian, Dade, Dallas, Greene, Hickory, Jasper, Lawrence, Laclede, McDonald, Newton, Polk, Stone, Taney, and Webster
NINTH	**David O. Barbe, M.D.,** *Mountain Grove*	Crawford, Dent, Douglas, Howell, Maries, Oregon, Ozark, Phelps, Pulaski, Shannon,* Texas and Wright
TENTH	**Melvin C. Kasten, M.D.,** *Cape Girardeau*	Bollinger, Butler, Cape Girardeau, Carter, Dunklin, Iron, Jefferson, Madison, Mississippi, New Madrid, Pemiscot, Perry, Reynolds, Ripley, St. Francois, Ste. Genevieve, Scott, Stoddard, Washington and Wayne

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* **Counties with no medical organization.**

Code Numbers

for Component Medical Societies

Code	Society	
002	MSMA Only	531
010	Andrew	532
014	Audrain	532
018	Barton	532
026	Boone (includes Cooper-Howard)	532
030	Buchanan	536
034	Butler-Wayne-Ripley-Carter	537
038	Callaway	538
042	Cape Girardeau	538
046	Chariton-Macon-Monroe-Randolph	540
050	Clay-Platte	540
054	Clinton	542
058	Cole (includes Moniteau-Osage)	542
066	Dallas-Hickory-Polk-Dade	543
070	Dunklin	543
074	Franklin-Gasconade-Warren	543
078	Grand River (Caldwell-Carroll-Daviess-DeKalb-Grundy-Harrison-Linn Mercer-Livingston)	544
082	Greene	544
086	Henry	550
102	Jasper	550
106	Jefferson	551
110	Johnson	552
115	Laclede	552
118	Lafayette-Ray	552
120	Lake of the Ozarks (Camden-Miller-Morgan)	552
125	Metro Med - Greater Kansas City	553
135	Mid-Missouri (Crawford-Dent-Maries-Phelps-Pulaski)	566
138	Mineral Area (Bollinger-Iron-Madison-Reynolds-St. Francois-Washington)	567
146	Montgomery	567
148	North Central (Adair-Knox-Putnam-Schuyler-Sullivan)	567
150	Northeast (Clark-Lewis-Marion-Ralls-Scotland-Shelby)	567
158	Northwest (Atchison-Gentry-Holt-Nodaway-Worth)	568
166	Ozarks (Barry-Christian-Lawrence-McDonald-Newton	568
170	Pemiscot	569
174	Perry-Ste. Genevieve	569
178	Pettis	569
186	Pike	569
189	St. Charles-Lincoln	569
190	St. Louis Metropolitan	570
198	Saline	594
202	SEMO (Mississippi-New Madrid-Scott-Stoddard)	594
206	South Central (Douglas-Howell-Oregon-Ozarks-Texas-Wright)	595
208	Tri-Lakes (Stone-Taney)	595
210	Webster	595
214	West Central (Bates-Cass-Cedar-St. Clair-Vernon)	595
215	Resident Physician Section	596
216	St. Louis University	599
218	University of Missouri-Columbia	599
220	University of Missouri-Kansas City	600
222	Washington University	600

Designated Specialty Codes

*The following specialties are recognized by the American Medical Association.**

A	Allergy
ABS	Abdominal Surgery
ADL	Adolescent Medicine
AI	Allergy and Immunology
AM	Aerospace Medicine
AN	Anesthesiology
ATP	Anatomic Pathology
BLB	Bloodbanking
CCM	Critical Care Medicine
CD	Cardiovascular Diseases
CDS	Cardiovascular Surgery
CHN	Child Neurology
CHP	Child Psychiatry
CLP	Clinical Pathology
CMP	Chemical Pathology
CRS	Colon and Rectal Surgery
D	Dermatology
DIA	Diabetes
DLI	Diagnostic Laboratory Immunology
DMP	Dermatopathology
DR	Diagnostic Radiology
EM	Emergency Medicine
END	Endocrinology
FOP	Forensic Pathology
FP	Family Practice
FPS	Facial Plastic Surgery
GE	Gastroenterology
GER	Geriatrics
GO	Gynecological Oncology
GP	General Practice
GPM	General Preventive Medicine
GS	General Surgery
GYN	Gynecology
HEM	Hematology
HNS	Head and Neck Surgery
HS	Hand Surgery
ID	Infectious Diseases
IG	Immunology
IM	Internal Medicine
IP	Immunopathology
LM	Legal Medicine
MFM	Maternal and Fetal Medicine
MM	Medical Microbiology
N	Neurology
NA	Neuropathology
ND	Neoplastic Diseases
NEP	Nephrology
NM	Nuclear Medicine
NPM	Neonatal-Perinatal Medicine
NR	Nuclear Radiology
NS	Neurological Surgery
NTR	Nutrition
OBG	Obstetrics and Gynecology
OBS	Obstetrics
OM	Occupational Medicine
ON	Oncology
OPH	Ophthalmology
ORS	Orthopedic Surgery
OS	Other, i.e., physician designated a specialty other than appearing here.
OTO	Otorhinolaryngology
P	Psychiatry
PA	Clinical Pharmacology
PD	Pediatrics
PDA	Pediatric Allergy
PDC	Pediatric Cardiology
PDE	Pediatric Endocrinology
PDP	Pediatric Pulmonology
PDR	Pediatric Radiology
PDS	Pediatric Surgery
PH	Public Health
PHO	Pediatric Hematology-Oncology
PM	Physical Medicine and Rehabilitation
PNP	Pediatric Nephrology
PS	Plastic Surgery
PSF	Facial Plastic Surgery
PTH	Pathology
PUD	Pulmonary Diseases
PYA	Psychoanalysis
R	Radiology
REN	Reproductive Endocrinology
RHU	Rheumatology
RIP	Radioisotopic Radiology
RO	Radiation Oncology
TR	Therapeutic Radiology
TRS	Traumatic Surgery
TS	Thoracic Surgery
U	Urology
US	Urological Surgery
VS	Vascular Surgery
Note:	No code will appear for those physicians who have not designated a specialty.

* **This list was updated in March 1990.**

Guide to Component Medical Societies

Town	County	Medical Society
	A	
Advance	Stoddard	SEMO
Albany	Gentry	Northwest Missouri
Appleton City	St. Clair	West Central
Arnold	Jefferson	Jefferson
Arrow Rock	Saline	Saline
Ash Grove	Greene	Greene
Ashland	Boone	Boone
Aurora	Lawrence	Ozarks
Ava	Douglas	South Central
	B	
Ballwin	St. Louis	St. Louis Metropolitan
Barnhart	St. Louis	St. Louis Metropolitan
Bethany	Harrison	Grand River
Belton	Cass	West Central
Blue Springs	Jackson	Metro Med of Greater Kansas City
Bolivar	Polk	Dallas-Hickory-Polk-Dade
Bonne Terre	St. Francois	Mineral Area
Boonville	Cooper	Boone
Branson	Taney	Tri-Lakes
Brentwood	St. Louis	St. Louis Metropolitan
Bridgeton	St. Louis	St. Louis Metropolitan
Brookfield	Linn	Grand River
Brunswick	Chariton	Chariton-Macon-Monroe-Randolph
Buffalo	Dallas	Dallas-Hickory-Polk-Dade
Butler	Bates	West Central
	C	
Cabool	Texas	South Central
California	Moniteau	Cole
Camdenton	Camden	Lake of the Ozarks
Cape Girardeau	Cape Girardeau	Cape Girardeau
Carrollton	Carroll	Grand River
Carthage	Jasper	Jasper
Caruthersville	Pemiscot	Pemiscot
Cassville	Barry	Ozarks
Centralia	Boone	Boone
Charleston	Mississippi	SEMO
Chesterfield	St. Louis	St. Louis Metropolitan
Chillicothe	Livingston	Grand River
	C	
Clarkson Valley	St. Louis	St. Louis Metropolitan
Clayton	St. Louis	St. Louis Metropolitan
Clinton	Henry	Henry
Columbia	Boone	Boone
Concordia	Lafayette	Lafayette-Ray
Crestwood	St. Louis	St. Louis Metropolitan
Creve Coeur	St. Louis	St. Louis Metropolitan
Crystal City	Jefferson	Jefferson
Cuba	Crawford	Mid-Missouri
	D	
Deepwater	Henry	Henry
Desloge	St. Francois	Mineral Area
DeSoto	Jefferson	Jefferson
Dexter	Stoddard	SEMO
Doniphan	Ripley	Butler-Wayne-Ripley-Carter
	E	
East Prairie	Mississippi	SEMO
Eldon	Miller	Lake of the Ozarks
El Dorado Springs	Cedar	West Central
Ellisville	St. Louis	St. Louis Metropolitan
Elsbury	Lincoln	St. Charles-Lincoln
Eureka	St. Louis	St. Louis Metropolitan
Excelsior Springs	Clay	Clay-Platte
	F	
Fairfax	Atchison	Northwest Missouri
Farmington	St. Francois	Mineral Area
Fayette	Howard	Boone
Fenton	St. Louis	St. Louis Metropolitan
Festus	Jefferson	Jefferson
Flat River	St. Francois	Mineral Area
Florissant	St. Louis	St. Louis Metropolitan
Forsyth	Taney	Tri-lakes
Fort Leonard Wood	Pulaski	Mid-Missouri
Fredericktown	Madison	Mineral Area
Fulton	Callaway	Callaway

Town	County	Medical Society
	G	
Galena	Jackson	Metro Med of Greater Kansas City
Gallatin	Daviess	Grand River
Gladstone	Clay	Clay-Platte
Glasgow	Howard	Boone
Glendale	St. Louis	St. Louis Metropolitan
Gower	Buchanan	Buchanan
Grandview	Jackson	Metro Med of Greater Kansas City
Greenwood	Jackson	Metro Med of Greater Kansas City
	H	
Hamilton	Caldwell	Grand River
Hannibal	Marion	Northeast
Harrisonville	Cass	West Central
Hayti	Pemiscot	Pemiscot
Hazelwood	St. Louis	St. Louis Metropolitan
Herculaneum	Jefferson	Jefferson
Hermann	Gasconade	Franklin-Gasconade-Warren
Higginsville	Lafayette	Lafayette-Ray
High Ridge	St. Louis	St. Louis Metropolitan
Holden	Johnson	Johnson
Hornersville	Dunklin	Dunklin
House Springs	St. Louis	St. Louis Metropolitan
Houston	Texas	South Central
Hughesville	Pettis	Pettis
Huntsville	Randolph	Chariton-Macon-Monroe-Randolph
	I	
Independence	Jackson	Metro Med of Greater Kansas City
Ironton	Iron	Mineral Area
	J	
Jackson	Cape Girardeau	Cape Girardeau
Jefferson City	Cole	Cole
Joplin	Jasper	Jasper
	K	
Kansas City	Jackson	Metro Med of Greater Kansas City
Kennett	Dunklin	Dunklin
Kimberling City	Stone	Dunklin
	K	
Kirksville	Adair	North Central
Kirkwood	St. Louis	St. Louis Metropolitan
	L	
Ladue	St. Louis	St. Louis Metropolitan
LaGrange	Lewis	Northeast
Lake Ozark	Miller	Lake of the Ozarks
Lake Sherwood	St. Louis	St. Louis Metropolitan
Lake St. Louis	St. Louis	St. Louis Metropolitan
Lamar	Barton	Barton
Lebanon	Laclede	Laclede
Lee's Summit	Jackson	Metro Med of Greater Kansas City
Lexington	Lafayette	Lafayette-Ray
Liberty	Clay	Clay-Platte
Linn	Osage	Cole
Louisiana	Pike	Pike
	M	
Macon	Macon	Chariton-Macon Monroe-Randolph
Malden	Dunklin	Dunklin
Manchester	St. Louis	St. Louis Metropolitan
Mansfield	Wright	South Central
Marceline	Linn	Grand River
Marshall	Saline	Saline
Marshfield	Webster	Webster
Marthasville	Warren	Franklin-Gasconade-Warren
Maryland Heights	St. Louis	St. Louis Metropolitan
Maryville	Nodaway	Northwest Missouri
Mexico	Audrain	Audrain
Moberly	Randolph	Chariton-Macon-Monroe-Randolph
Monett	Barry	Ozarks
Mound City	Holt	Northwest Missouri
Mount Vernon	Lawrence	Ozarks
Mountain Grove	Wright	South Central
	N	
Neosho	Newton	Ozarks
Nevada	Vernon	West Central
New Bloomfield	Cole	Cole
New Haven	Franklin	Franklin-Gasconade-Warren
New London	Ralls	Northeast
Nixa	Christian	Ozarks
Normandy	St. Louis	St. Louis Metropolitan
North Kansas City	Clay	Clay-Platte

Town	County	Medical Society
O		
Odessa	Jackson	Metro Med of Greater Kansas City
O'Fallon	St. Charles	St. Charles-Lincoln
Osage Beach	Camden	Ozarks
Osceola	St. Clair	West Central
Ozark	Christian	Ozarks
P		
Pacific	Franklin	Franklin-Gasconade-Warren
Palmyra	Marion	Northeast
Paris	Monroe	Chariton-Macon-Monroe-Randolph
Parkville	Platte	Clay-Platte
Perryville	Perry	Perry-Ste. Genevieve
Piedmont	Wayne	Butler-Wayne-Ripley-Carter
Pierce City	Lawrence	Ozarks
Platte City	Platte	Clay-Platte
Plattsburg	Clinton	Clinton
Pleasant Hill	Cass	West Central
Poplar Bluff	Butler	Butler-Wayne-Ripley-Carter
Portageville	New Madrid	SEMO
Potosi	Washington	Mineral Area
Puxico	Stoddard	SEMO
R		
Raymore	Cass	West Central
Raytown	Jackson	Metro Med of Greater Kansas City
Richmond	Ray	Lafayette-Ray
Richmond Heights	St. Louis	St. Louis Metropolitan
Rocheport	Boone	Boone
Rock Hill	St. Louis	St. Louis Metropolitan
Rock Port	Atchison	Northwest
Rogersville	Webster	Webster
Rolla	Phelps	Mid-Missouri
Rosendale	Andrew	Andrew
S		
St. Ann	St. Louis	St. Louis Metropolitan
St. Charles	St. Charles	St. Charles-Lincoln
St. Clair	Franklin	Franklin-Gasconade-Warren
Ste. Genevieve	Ste. Genevieve	Ste. Genevieve
St. Joseph	Buchanan	Buchanan
St. Louis	St. Louis	St. Louis Metropolitan
St. Peters	St. Charles	St. Charles-Lincoln
Salem	Dent	Mid-Missouri
Sarcoxie	Jasper	Jasper
Savannah	Andrew	Andrew
Scott City	Scott	SEMO
Sedalia	Pettis	Pettis
Senath	Dunklin	Dunklin
Shelbina	Shelby	Northeast Missouri
Shell Knob	Barry	Ozarks
Sikeston	Scott	SEMO
Smithville	Clay	Clay-Platte
Springfield	Greene	Greene
Stanberry	Gentry	Northwest Missouri
Steelville	Crawford	Mid-Missouri
Strafford	Greene	Greene
Sullivan	Franklin	Franklin-Gasconade-Warren
Sweet Springs	Saline	Saline
T		
Tarkio	Atchison	Northwest Missouri
Thayer	Oregon	South Central
Town and County	St. Louis	St. Louis Metropolitan
Trenton	Grundy	Grand River
Troy	Lincoln	St. Charles-Lincoln
Turners	Greene	Greene
U		
Union	Franklin	Franklin-Gasconade-Warren
University City	St. Louis	St. Louis Metropolitan
V		
Valley Park	St. Louis	St. Louis Metropolitan
Van Buren	Carter	Butler-Wayne-Ripley-Carter
Versailles	Morgan	Lake of the Ozarks
W		
Warrensburg	Johnson	Johnson
Warrrenton	Warren	Franklin-Gasconade-Warren
Washington	Franklin	Franklin-Gasconade-Warren
Waverly	Lafayette	Lafayette-Ray
Waynesville	Pulaski	Mid-Missouri
Webb City	Jasper	Jasper
Webster Groves	St. Louis	St. Louis Metropolitan
Wellsville	Montgomery	Montgomery
Wentzville	St. Charles	St. Charles-Lincoln
West Plains	Howell	South Central
Whitewater	Cape Girardeau	Cape Girardeau
Willow Springs	Howell	South Central
Windsor	Henry	Henry

Health Access America

The AMA proposal to
improve access to affordable,
quality health care.

"I can't afford to go to the doctor."

We hear that a lot from our patients these days. For the 33 million people who have no health insurance, it's a particularly acute problem.

That's why the AMA has launched a proposal to improve access to affordable, quality health care. It's called *Health Access America.* The message is being sent to Congress, the media, labor and management organizations, concerned groups like AARP, and your fellow physicians.

Simply, *Health Access America* proposes health insurance coverage for all Americans, regardless of income or health status. It calls for expanded publicly-funded health care for the needy; a stronger Medicare system; employer-provided coverage for all workers and their families with tax incentives for small businesses.

America's physicians are leading the way to reforming the health care system by speaking out on these critical issues.

To get a copy of the *Health Access America* proposal, please call our Member Service Center at 1-800-AMA-3211.

The American Medical Association
on behalf of member physicians and their patients.

A message from The American Medical Association for the Health Access America Propos

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Alphabetical Roster of Members

Including name and code number of each member's component medical society.

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Biggs, Alfred D	METRO MED	125
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Biggs, John	ST. LOUIS METROP.	190
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Billy, Lawrence J	ST. LOUIS METROP.	190
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Blackburn, Michael D	BOONE	026
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Blim, R. Don	METRO MED	125
Block, Arnold S	ST. LOUIS METROP.	190
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Bloom, Stephen A	METRO MED	125
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Bohon, Barbara D	METRO MED	125
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Bradley, Richard V	ST. LOUIS METROP.	190
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Brown, Frances S	METRO MED	125
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Brown, Merlin D	BUCHANAN	030
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Bryan, Wm H	METRO MED	125
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Buben, Robt W	NORTHEAST	150
Buchanan, Barbara N	METRO MED	125
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Buth, Joseph A	SEMO	202
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Butler, Elza F	BUCHANAN	030
Butler, Mary A	NORTHEAST	150
Butler, Stephen M	NORTHEAST	150
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Cary, John M	ST. LOUIS METROP.	1
Case, Mary E	ST. LOUIS METROP.	1
Case, Wm F	METRO MED	1
Casement, Brian A	METRO MED	1
Casey, Arthur L	ST. LOUIS METROP.	1
Casey, Edwin J	ST. LOUIS METROP.	1
Casey, Eliot C	ST. LOUIS METROP.	1
Cashman, John W	METRO MED	1
Cason, Elbert H	ST. LOUIS METROP.	1
Cassat, James D	F-G-W	0
Castaneda, Marco A	ST. LOUIS METROP.	1
Caster, Philip W	LACLEDE	1
Catanzaro, Anthony F	ST. LOUIS METROP.	1
Catanzaro, Frank J	ST. LOUIS METROP.	1
Catanzaro, Rudolph E	ST. LOUIS METROP.	1
Catanzaro, Frank J	ST. LOUIS METROP.	1
Catron, David O	CAPE GIRARDEAU	0
Caughron, Michael R	METRO MED	1
Ceaser, Nancy H	GREENE	0
Ceaser, James H	GREENE	0
Centner, Paul J	METRO MED	1
Cento, Donald	SEMO	2
Chadaratana, Phadung	ST. LOUIS METROP.	1
Chaffin, Jerald D	TRI-LAKES	2
Chalkley, Judson I	BOONE	0
Chamness, James T	ST. LOUIS METROP.	1
Chanasue, John A	ST. LOUIS METROP.	1
Chand, Suresh	MSMA	0
Chand, Nazar	B-W-R-C	0
Chandler, Robt A	METRO MED	1
Chandra, Mahesh	METRO MED	1
Chandramohan, Nanjappa	JASPER	1
Chanduwadia, Dossu J	JEFFERSON	1
Chang, Chil K	BOONE	0
Chapman, James B	CAPE GIRARDEAU	0
Chapman, Jean A	CAPE GIRARDEAU	0
Chapman, C. Larry	BOONE	0
Chapman, Ramona Marie	JASPER	1
Charapata, Steven G	METRO MED	1
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Chung, Richard T	METRO MED	125
Chung, Sophia M	ST. LOUIS METROP.	190
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Churchill, Robert J	BOONE	026
Churchill, Stephen W	METRO MED	125
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Clark, David P	BOONE	026
Clark, Gail L	MSMA	002
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Clark, Granville E	METRO MED	125
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Ellis, John C	METRO MED	125
Ellis, Ronald L	GREENE	082
Ellsasser, James C	BOONE	026
Elser, Otto H	METRO MED	125
Ely, Norman B	GREENE	082
Emanuel, James P	ST. LOUIS METROP.	190
Emeran, George J	ST. LOUIS METROP.	190
Emons, Matthew F	ST. LOUIS METROP.	190
Engelberg, Alan L	ST. LOUIS METROP.	190
Engelhardt, Robt C	B-W-R-C	034
Engelken, Michael K	NORTHWEST	158
English, Milton T	NORTH CENTRAL	148
English, Wallace D	DUNKLIN	070
*Ennis, James R	COLE	058
Enriquez, Roman S	METRO MED	125
Ericsson, Saml E	METRO MED	125
Ernst, Edwin C	ST. LOUIS METROP.	190
Ernst, Edwin C	ST. LOUIS METROP.	190
Ernst, Joseph G	ST. LOUIS METROP.	190
Ernst, Richard E	ST. LOUIS METROP.	190
Ernst, Roland P	ST. LOUIS METROP.	190
Esch, John G	JASPER	102
Escoffery, Richard F	ST. LOUIS METROP.	190
Esparrago, F R	OZARKS	166
Essmyer, Joseph K	CAPE GIRARDEAU	042
Esther, James H	ST. LOUIS METROP.	190
Esther, John W	GREENE	082
Esther, John R	JASPER	102
Estrem, Scott A	BOONE	026
Eto, Jackson K	ST. LOUIS METROP.	190
Ettelson, Charles D	ST. LOUIS METROP.	190
Eubank, David F	METRO MED	125
Eubank, Wm Y	METRO MED	125
Evans, Ezra L	GREENE	082
Evans, Joseph C	METRO MED	125
Evans, Lawrence L	METRO MED	125
Evans, Lawrence G	ST. LOUIS METROP.	190
Evens, Ronald G	ST. LOUIS METROP.	190
Eversoll, Norton J	ST. LOUIS METROP.	190
Every, Pamela D	CAPE GIRARDEAU	042
Exarhou, Klark	ST. LOUIS METROP.	190
Exon, C S	COLE	058
Eyerman, Edward L	ST. LOUIS METROP.	190

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Fabian, Leonard W	ST. LOUIS METROP.	190
Fabito, Daniel C	ST. LOUIS METROP.	190
Fagan, Leonard F	ST. LOUIS METROP.	190
Fair, Wm L	GRAND RIVER	078
Fairchild, James F	PERRY-STE GENEVIEVE	174
Fairchild, Robt C	METRO MED	125
Fajatin, Romulo J	ST CHARLES-LINCOLN	189
Fakhoury, Donald A	CLAY-PLATTE	050
Fallon, Richard H	ST. LOUIS METROP.	190
Falzone, John J	COLE	058
Farber, Barry S	GREENE	082
Farberman, Elliott	ST. LOUIS METROP.	190
Farkas, James R	PETTIS	178
Farley, W. Joe	GREENE	082
Farmer, Norma D	MINERAL AREA	138
Farnham, Milo M	METRO MED	125
Faron, Mark A	ST. LOUIS METROP.	190
Farrar, Michael W	METRO MED	125
Farrell, John S	ST. LOUIS METROP.	190
Farrell, Sammy L	F-G-W	074
Farrell, Susan E	METRO MED	125
Farthing, Gene W	GREENE	082
Faszholz, Mark S	MSMA	002
Fathman, Anthony E	ST. LOUIS METROP.	190
Favazza, Armando R	BOONE	026
Favors, Adolphus C	ST. LOUIS METROP.	190
Fedotin, Michael S	METRO MED	125
Fee, Chester F	METRO MED	125
Fehlman, Bernard F	ST. LOUIS METROP.	190
Feibel, Robt M	ST. LOUIS METROP.	190
Feit, Robert M	ST. LOUIS METROP.	190
Feldman, David	ST. LOUIS METROP.	190
Feldman, Mark R	ST CHARLES-LINCOLN	189
Feliciano, Wilfrido C	ST. LOUIS METROP.	190
Felker, C. Edward	SEMO	202
Felker, J. Russell	CAPE GIRARDEAU	042
Feller, Harold H	ST. LOUIS METROP.	190
Feltz, Lawrence W	PERRY-STE GENEVIEVE	174
Ferber, Alan J	METRO MED	125
Ferguson, John P	GREENE	082
Ferguson, John F	GREENE	082
Ferguson, John L	GREENE	082
Ferguson, Robt M	JASPER	102
Ferguson, Thomas B	ST. LOUIS METROP.	190
Fernandez, Fernando	BUCHANAN	030
Fernandez, Mark A	METRO MED	125
Ferneau, James E	BOONE	026
Ferns, Francis E	METRO MED	125
Ferrara, Robert P	ST. LOUIS METROP.	190
Ferrari, Herbert A	BOONE	026
Ferrendelli, James A	ST. LOUIS METROP.	190
Ferris, Carl R	METRO MED	125
Ferris, Charles W	ST. LOUIS METROP.	190
Ferris, Robert E	COLE	058
Ferry, Richard J	ST. LOUIS METROP.	190
Fibuch, Eugene E	METRO MED	125
Figueroa, Edduyn	ST. LOUIS METROP.	190
Figueroa, Eliseo O	ST. LOUIS METROP.	190
Finch, William O	PEMISCOT	170
Fingert, Hyman H	ST. LOUIS METROP.	190
Fink, Leroy L	ST. LOUIS METROP.	190
Fink, Roger L	GREENE	082

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Finkel, Barney W	190	ST. LOUIS METROP.
Finnegan, Jos V	190	ST. LOUIS METROP.
Fiore, Andrew C	190	ST. LOUIS METROP.
Fischbein, Lewis C	190	ST. LOUIS METROP.
Fischer, Edward H	050	CLAY-PLATTE
Fischer, John R	190	ST. LOUIS METROP.
Fischer, Robert	190	ST. LOUIS METROP.
Fish, Virgil O	190	ST. LOUIS METROP.
Fisher, James K	125	METRO MED
Fisher, Jos L	030	BUCHANAN
Fisher, Linda	190	ST. LOUIS METROP.
***Fisher, Robert B**	026	BOONE
Fishman, Norman	190	ST. LOUIS METROP.
Fitch, Coy D	190	ST. LOUIS METROP.
Fitz, John R	138	MINERAL AREA
Fitzgerald, Robert H	125	METRO MED
Fitzmaurice, Laura S	125	METRO MED
FitzSimmons, James G	125	METRO MED
Fivian, Gerald J	190	ST. LOUIS METROP.
Flance, Israel J	190	ST. LOUIS METROP.
Fleishman, Alfred	190	ST. LOUIS METROP.
Fleming, Allan R	125	METRO MED
Fleming, David A	046	C-M-M-R
Fleming, J. Will	046	C-M-M-R
Fleming, Robt J	189	ST CHARLES-LINCOLN
Fleshman, James W	190	ST. LOUIS METROP.
Fletcher, Robert C	125	METRO MED
Fletes, James W	190	ST. LOUIS METROP.
Flicker, Michele R	125	METRO MED
Florendo, Federico N	150	NORTHEAST
Florendo, Purificacion T	150	NORTHEAST
Flores, Jhonson E	190	ST. LOUIS METROP.
Floro, Kenneth E	190	ST. LOUIS METROP.
Floro, Mariano N	190	ST. LOUIS METROP.
Flotte, Sylvester A	190	ST. LOUIS METROP.
Flug, Eric J	190	ST. LOUIS METROP.
Flury, Kirk E	190	ST. LOUIS METROP.
Flye, M. Wayne	190	ST. LOUIS METROP.
Flynn, James M	125	METRO MED
Flynn, John T	190	ST. LOUIS METROP.
Fogarty, William M	190	ST. LOUIS METROP.
Fogel, Steven T	125	METRO MED
Fogle, Philip R	082	GREENE
Folck, Wm P	125	METRO MED
Foley, Jonathon K	042	CAPE GIRARDEAU
Folkner, Albert L	110	JOHNSON
Foote, Daniel D	082	GREENE
Foote, Jerry E	026	BOONE
Forand, Joseph M	190	ST. LOUIS METROP.
Ford, Lee T	190	ST. LOUIS METROP.
Ford, Thomas E	190	ST. LOUIS METROP.
Foreman, Phillip B	150	NORTHEAST
Forgue, Donald R	125	METRO MED
Forman, Louis H	125	METRO MED
Forney, Joseph W	014	AUDRAIN
Forsman, Waldo W	190	ST. LOUIS METROP.
Forsyth, B. Todd	190	ST. LOUIS METROP.
Forsythe, Lees C	125	METRO MED
Forsythe, Robert W	125	METRO MED
Fortin, Don G	050	CLAY-PLATTE
Fortin, Felix D	125	METRO MED
Fortin, Jorge A	135	MID-MISSOURI
Foster, R. Steve	178	PETTIS
Fotopoulos, Chris K	120	LAKE OF THE OZARKS
Fouraker, Bradley D	190	ST. LOUIS METROP.
Fouts, Dallas B	125	METRO MED
Fowler, Fred D	125	METRO MED
Fowler, I. Charles	050	CLAY-PLATTE
Fowler, James W	125	METRO MED
Fowler, Marvin L	206	SOUTH CENTRAL
Fowler, Wayne L	125	METRO MED
Fox, Gerald E	030	BUCHANAN
Fox, Robert E	190	ST. LOUIS METROP.
Fox, Thomas J	190	ST. LOUIS METROP.
Francis, Roger A	120	LAKE OF THE OZARKS
Francisco, Clarence B	125	METRO MED
Francisco, Dominic S	190	ST. LOUIS METROP.
Frank, Bruce S	189	ST CHARLES-LINCOLN
Frank, Gael R	125	METRO MED
***Frank, Robert A**	125	METRO MED
Franklin, Harold A	190	ST. LOUIS METROP.
Franks, Elliott L	125	METRO MED
Fraser, Danl M	190	ST. LOUIS METROP.
Fraser, Richard A	034	B-W-R-C
Frawley, Thomas F	190	ST. LOUIS METROP.
Frazier, Robt E	026	BOONE
Frazier, Robt L	202	SEMO
***Frederick, Mark R**	058	COLE
Frederickson, Neil W	190	ST. LOUIS METROP.
Freedman, Ruth S	190	ST. LOUIS METROP.
Freeman, James A	026	BOONE
Freeman, Jerry C	125	METRO MED
Freeman, Michael R	042	CAPE GIRARDEAU
Freeman, Randolph M	002	MSMA
Freiden, Floyd J	125	METRO MED
Freiman, Paul C	082	GREENE
Frein, Donald E	214	WEST CENTRAL
French, M. Devonne	125	METRO MED
Frenz, Exec. Sec., Mrs. Lois	001	Exectutive Secys.
Frewin, Paul R	082	GREENE
Fried, John S	125	METRO MED
Friedman, Michael J	125	METRO MED
Friedman, Morris L	125	METRO MED
Friedman, Robt H	190	ST. LOUIS METROP.
Friedman, William H	190	ST. LOUIS METROP.
Friend, T. Gregory	125	METRO MED
Fries, John W	190	ST. LOUIS METROP.
Friesen, Randall G	189	ST CHARLES-LINCOLN
Frissell, Dan H	174	PERRY-STE GENEVIEVE
Fritsch, Andrew J	102	JASPER
Fritzlen, Thos J	125	METRO MED
Froehlich, Thomas W	082	GREENE
Frogge, Jim D	102	JASPER
Frohman, Boris	202	SEMO
Fromme, Glenn A	082	GREENE
Frumson, Guy H	190	ST. LOUIS METROP.
Fuchs, Geo J	026	BOONE
Fuhrman, Donald L	125	METRO MED
Fuleihan, Farid M	190	ST. LOUIS METROP.
Fulks, Richard B	058	COLE
Fuller, Terry A	190	ST. LOUIS METROP.
Funsch, Robert E	190	ST. LOUIS METROP.
Furla, August J	190	ST. LOUIS METROP.
Furlong, Lawrence D	125	METRO MED

G

Gabel, Michael G	190	ST. LOUIS METROP.
Gadson, Michael T	150	NORTHEAST
Gaffney, Jon W	030	BUCHANAN
Gafford, Franklin H	190	ST. LOUIS METROP.
Gagliardo, Joseph	190	ST. LOUIS METROP.
Gaines, Robert W	026	BOONE
Gainor, Barry J	026	BOONE
Gaitonde, Mangesh R	026	BOONE
Galakatos, Andrew E	190	ST. LOUIS METROP.
Galant, Mark R	125	METRO MED
Galblum, Larry I	125	METRO MED
Gale, Arthur H	190	ST. LOUIS METROP.
Gale, Joseph F	078	GRAND RIVER
Galinsky, Leon J	166	OZARKS
Gall, Ira C	190	ST. LOUIS METROP.
Galvez, Sisenando P	078	GRAND RIVER
Gambill, Gary L	002	MSMA
Gandlmayr, Jack M	190	ST. LOUIS METROP.
Gans, Lawrence A	190	ST. LOUIS METROP.
Gansloser, Wilbert M	190	ST. LOUIS METROP.
Garcia, Delia M	190	ST. LOUIS METROP.
Garcia-Ferrer, Eduardo L	190	ST. LOUIS METROP.
Garcia-Ferrer, Eduardo A	190	ST. LOUIS METROP.
Gard, Raymond F	125	METRO MED
Gardner, Joe A	102	JASPER
Gardner, Jos W	166	OZARKS
Garfinkel, Bernard T	190	ST. LOUIS METROP.
Garfinkel, Lester S	125	METRO MED
Garrett, Elizabeth A	026	BOONE
Garrett, Ted E	190	ST. LOUIS METROP.
Garrett, Exec VP, G. R.	001	Exectutive Secys.
Garriga, Francisco J	190	ST. LOUIS METROP.
Garrison, David L	030	BUCHANAN
Garrison, Roy F	125	METRO MED
Garrison, Theodore W	120	LAKE OF THE OZARKS
Garrotto, Lewis J	026	BOONE
Garvin, Charles F	190	ST. LOUIS METROP.
Garvin, Paul J	190	ST. LOUIS METROP.
Gaska, Walter J	082	GREENE
Gaskin, Fred W	190	ST. LOUIS METROP.
Gatchalian, Felicitas Z	190	ST. LOUIS METROP.
Gates, George A	190	ST. LOUIS METROP.
Gauer, Robt J	050	CLAY-PLATTE
Gauthier, Charles P	125	METRO MED
Gavankar, Sharad S	102	JASPER

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Gavini, Rajendra R	ST. LOUIS METROP.	190
Gay, John W	BOONE	026
*Gayle, David R	B-W-R-C	034
*Gayle, Richard E	B-W-R-C	034
Gearhart, Wilbur H	ST. LOUIS METROP.	190
Gedney, Wm B	ST. LOUIS METROP.	190
Gehm, Louis E	WEST CENTRAL	214
Geier, Larry J	METRO MED	125
Geiger, Wm A	METRO MED	125
Geise, August W	ST. LOUIS METROP.	190
Geisman, Richard A	ST CHARLES-LINCOLN	189
Geisse, Guillermo	ST. LOUIS METROP.	190
Geller, Bruce D	METRO MED	125
Gellman, Elliot F	ST. LOUIS METROP.	190
Gelstein, Laurence D	ST. LOUIS METROP.	190
Gendel, Jonathan	MSMA	002
Gennaoui, Jad M	ST. LOUIS METROP.	190
Gentry, Jim	GREENE	082
Gentry, Marvin C	SOUTH CENTRAL	206
Gentry, Michael A	GREENE	082
Gentsch, Kenneth W	ST. LOUIS METROP.	190
George, Philip G	ST. LOUIS METROP.	190
Georgi, Basil A	BOONE	026
Geraghty, Thomas E	METRO MED	125
Gerdes, John A	GREENE	082
Gerdes, K. Eric	GREENE	082
Gerecht, Wolfe B	GREENE	082
Gerhardt, Donald C	BOONE	026
German, Walter A	GREENE	082
Germann, Donald R	METRO MED	125
Gernstetter, S L	B-W-R-C	034
Gerowin, Lance	ST. LOUIS METROP.	190
Gerst, Aloysius C	ST. LOUIS METROP.	190
Gessler, James A	GREENE	082
Geter, Rodney K	GREENE	082
Geurkink, John W	JASPER	102
Gholkar, Vijay R	METRO MED	125
Ghosh, Nellie	ST. LOUIS METROP.	190
Giangiacomo, Joseph	BOONE	026
Gibbons, James J	ST. LOUIS METROP.	190
*Gibbons, Jerry L	ST. LOUIS METROP.	190
Gibbons, Robert T	METRO MED	125
Gibson, David M	METRO MED	125
Gibson, James D	GREENE	082
Gibson, Merlyn D	BOONE	026
Gibson, Paul H	ST. LOUIS METROP.	190
Gibson, Exec Dir, Lee	Exectutive Secys.	001
Giddings, Frank C	GREENE	082
Gieselmann, James W	B-W-R-C	034
*Giffen, Lawrence E	COLE	058
Gifford, David L	AUDRAIN	014
Gilbirds, William M	CLAY-PLATTE	050
Gilden, Jerome J	ST. LOUIS METROP.	190
Gile, Robert J	CAPE GIRARDEAU	042
Gill, Paul J	GREENE	082
Gillispie, John L	TRI-LAKES	208
Gilpin, Doris C	ST. LOUIS METROP.	190
Gilula, Louis A	ST. LOUIS METROP.	190
Gimpelson, Richard J	ST. LOUIS METROP.	190
Ginardi, Donald E	METRO MED	125
Ginsberg, B. William	METRO MED	125
Ginther, James W	ST. LOUIS METROP.	190
Giorgi, Lee V	METRO MED	125
Gish, E R	CALLAWAY	038
Givler, Robt L	METRO MED	125
Gladney, John H	ST. LOUIS METROP.	190
Glaser, Larry F	METRO MED	125
Glass, Wm J	OZARKS	166
Glazer, Harvey S	ST. LOUIS METROP.	190
Glazer, Melvin L	METRO MED	125
Glazzard, Charles D	GREENE	082
Glenn, Edward A	PIKE	186
Glenn, Theodore J	CAPE GIRARDEAU	042
Glenski, James A	METRO MED	125
Glickman, Andrew S	NORTHEAST	150
Glines, Michael H	ST. LOUIS METROP.	190
Glotzbach, Ellen S	METRO MED	125
Glover, David	JOHNSON	110
Glover, Kenneth	OZARKS	166
Glueck, Robert M	METRO MED	125
Gnade, Albert J	ST. LOUIS METROP.	190
Godar, Sharon A	ST. LOUIS METROP.	190
Goebel, Joan M	ST. LOUIS METROP.	190
Goebel, Joel A	ST. LOUIS METROP.	190
Goeking, C Keith	BUCHANAN	030
Goerz, Ann A	METRO MED	125
Goerz, Royal D	METRO MED	125
Goetz, Joseph J	METRO MED	125
Goetz, Kenneth L	METRO MED	125
Goff, John E	JASPER	102
Goheen, John R	METRO MED	125
Gold, Jonathan A	ST. LOUIS METROP.	190
Golden, Samuel E	GREENE	082
Goldfarb, Alvin	ST. LOUIS METROP.	190
Goldkamp, John D	ST CHARLES-LINCOLN	189
Goldman, Arnold M	ST. LOUIS METROP.	190
Goldman, Barry C	METRO MED	125
Goldman, Gordon M	ST. LOUIS METROP.	190
Goldman, Stanley L	METRO MED	125
Goldring, David	ST. LOUIS METROP.	190
Goldring, James M	BOONE	026
Goldring, Sidney	ST. LOUIS METROP.	190
Goldsich, Edward	METRO MED	125
Goldstein, David E	BOONE	026
Goldstein, Marcy A	ST. LOUIS METROP.	190
Goldstein, Marvin F	METRO MED	125
Goltschman, John P	ST. LOUIS METROP.	190
Gomez, Cesar A	ST. LOUIS METROP.	190
Gondring, William H	BUCHANAN	030
Gonzales, Jose H	PERRY-STE GENEVIEVE	174
Gonzalez, Alicia D	ST. LOUIS METROP.	190
Gonzalez, Mario G	JOHNSON	110
Good, Michael W	GREENE	082
Good, Thomas H	METRO MED	125
Goodenberger, Daniel M	ST. LOUIS METROP.	190
Goodhope, Karen F	ST. LOUIS METROP.	190
Goodman, Douglas E	GREENE	082
Goodman, Nathaniel	ST. LOUIS METROP.	190
Goodwin, J. Wendall	GREENE	082
Gordon, Bruce J	BOONE	026
Gordon, James M	ST. LOUIS METROP.	190
Gordon, James S	COLE	058
Gordon, Mark E	CLAY-PLATTE	050
*Gordon, Stephen M	METRO MED	125
Gose, Don F	GREENE	082
Gotti, Edward W	GREENE	082
Gottlieb, Charlene C	ST. LOUIS METROP.	190
Gottsch, Joseph C	METRO MED	125
Gould, Ronald J	ST. LOUIS METROP.	190
Gowda, Siddhesh	ST. LOUIS METROP.	190
Gowdamarajan, Rengasamy	METRO MED	125
Gowen, Rose M	ST. LOUIS METROP.	190
Grable, James D	CAPE GIRARDEAU	042
Grace, Steve	GREENE	082
Graden, William R	GREENE	082
Grady, Ronald K	ST. LOUIS METROP.	190
Graff, Ralph J	ST. LOUIS METROP.	190
Graham, Bruce D	METRO MED	125
Graham, Joseph E	ST. LOUIS METROP.	190
Graham, Wallace H	METRO MED	125
Grand, M. Gilbert	ST. LOUIS METROP.	190
Grannemann, H. Neal	MID-MISSOURI	135
Grant, John M	ST. LOUIS METROP.	190
Grant, Neville	ST. LOUIS METROP.	190
Grant, Ruth	GREENE	082
Grant, William T	ST. LOUIS METROP.	190
Graul, Walter P	ST. LOUIS METROP.	190
*Graves, Karladine E	CLAY-PLATTE	050
Graves, Kathleen L	GREENE	082
Graviss, Edward R	ST. LOUIS METROP.	190
Gray, Gary J	ST. LOUIS METROP.	190
Grebe, T. Keith	JASPER	102
Grechus, John J	MINERAL AREA	138
Greditzer, Harry G	ST. LOUIS METROP.	190
Green, J. Richard	METRO MED	125
Green, Morton R	ST. LOUIS METROP.	190
Green, Thomas F	METRO MED	125
Green, Wm R	ST. LOUIS METROP.	190
Greenberg, Benjamin E	TRI-LAKES	208
Greene, Harry L	NORTHEAST	150
Greenlaw, Cal W	GRAND RIVER	078
Greenlund, Nelson C	WEST CENTRAL	214
*Greenspan, Peter B	METRO MED	125
Gregory, John G	ST. LOUIS METROP.	190
Gresick, Robert J	ST. LOUIS METROP.	190
Gresick, Robt J	ST. LOUIS METROP.	190
Griesemer, Bernard A	GREENE	082
Griffin, Darrell L	MINERAL AREA	138
Griffin, Donald R	MSMA	002
Griffin, M E	D-H-P-D	066
Griffin, Olin A	D-H-P-D	066
Griffin, Wm T	BOONE	026

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Griffith, S Kent	042	CAPE GIRARDEAU
Grim, Edward M	102	JASPER
Grimes, Elwyn M	125	METRO MED
Grimes, Manning E	030	BUCHANAN
Grisham, Thomas D	074	F-G-W
Groce, Geo D	038	CALLAWAY
Groshong, Ted D	026	BOONE
Grossberg, George T	190	ST. LOUIS METROP.
Grow, Pamela K	135	MID-MISSOURI
Growdon, John A	125	METRO MED
Grubb, Robert L	190	ST. LOUIS METROP.
Grundmann, Wm H	190	ST. LOUIS METROP.
Grunt, Jerome A	125	METRO MED
Guastello, Joseph R	125	METRO MED
Guastello, Mario J	125	METRO MED
*Guenthner, Brenda L	058	COLE
Guerra, Gaston G	125	METRO MED
Guhleman, Henry V	058	COLE
Guindon, Kurt R	058	COLE
Gujarati, Subhash B	034	B-W-R-C
Gulick, C. Richard	190	ST. LOUIS METROP.
Gundle, Sigmund	125	METRO MED
Gunn, Jack	120	LAKE OF THE OZARKS
Gunn, Richard W	125	METRO MED
Gunn, Victoria	058	COLE
Gunn, Walter T	190	ST. LOUIS METROP.
Gunnoe, Robert E	125	METRO MED
Gunter, Joe S	030	BUCHANAN
Gupta, Mala R	125	METRO MED
Gupta, Nilakshi	026	BOONE
Gura, George M	125	METRO MED
Gurba, Carol L	125	METRO MED
Gurba, Danny M	125	METRO MED
Gurian, Lawrence E	082	GREENE
Gurucharri, Vincent P	026	BOONE
Gustafson, Jon E	125	METRO MED
Gutek, E. Philip	125	METRO MED
Gutierrez, Anthony C	125	METRO MED
Gutierrez-Medina, Ernesto	190	ST. LOUIS METROP.
Gutknecht, Richard	125	METRO MED
Gutwein, Michael B	190	ST. LOUIS METROP.
Guy, Cynthia S	190	ST. LOUIS METROP.
Guyer, Emily	026	BOONE
Guyol, William B	190	ST. LOUIS METROP.
Guze, Samuel B	190	ST. LOUIS METROP.
Gwin, Edward	082	GREENE

H

H'Doubler, Charles	082	GREENE
H'Doubler, Francis T	082	GREENE
H'Doubler, Peter B	082	GREENE
Ha, Richard J	150	NORTHEAST
Haake, Gregory K	082	GREENE
Haas, Harry D	125	METRO MED
Haas, Robert W	050	CLAY-PLATTE
Habermann, James H	102	JASPER
Habert, Edward R	190	ST. LOUIS METROP.
Habib, Henry N	125	METRO MED
Habiger, Thomas G	082	GREENE
Hacker, Douglas A	082	GREENE
Hackett, Earl R	082	GREENE
Haddock, James N	190	ST. LOUIS METROP.
Haddow, Alastair D	082	GREENE
Hagan, John C	050	CLAY-PLATTE
Hagemann, Margarethe H	190	ST. LOUIS METROP.
Hagemann, Paul O	190	ST. LOUIS METROP.
Hagen, Douglas W	125	METRO MED
Hagen, Duane Q	190	ST. LOUIS METROP.
Hagen, Garrett A	190	ST. LOUIS METROP.
Haggerty, Jesse C	190	ST. LOUIS METROP.
Hahn, Bruce H	125	METRO MED
Hahn, Frederick W	125	METRO MED
Hahn, Yoram	190	ST. LOUIS METROP.
Haight, J. Max	125	METRO MED
Haith, Walter F	125	METRO MED
Hale, Thomas H	190	ST. LOUIS METROP.
Halford, Richard M	190	ST. LOUIS METROP.
Hall, David W	082	GREENE
Hall, David G	026	BOONE
Hall, Durward G	082	GREENE
*Hall, Frederick K	125	METRO MED
*Hall, John P	042	CAPE GIRARDEAU
Hall, John C	125	METRO MED
Hall, Robt T	125	METRO MED
Hall, Stanley G	150	NORTHEAST
Hall, Terry E	078	GRAND RIVER
Halloran, Mark J	190	ST. LOUIS METROP.
Halperin, Phillip H	125	METRO MED
Halpin, Stephen E	150	NORTHEAST
Halverson, John D	190	ST. LOUIS METROP.
Halverson, Larry W	082	GREENE
Hamburg, Eric D	138	MINERAL AREA
Hamburg, Frederic L	082	GREENE
Hamburg, Mitchell S	125	METRO MED
Hamel, Peter C	150	NORTHEAST
Hamid, Rashid S	198	SALINE
Hamill, Robert W	125	METRO MED
Hamilton, Caldwell K	190	ST. LOUIS METROP.
Hamilton, Dennison R	002	MSMA
Hamilton, Eugene G	190	ST. LOUIS METROP.
*Hamilton, William V	050	CLAY-PLATTE
Hamilton, William P	190	ST. LOUIS METROP.
Hamilton, Wm P	166	OZARKS
Hamlin, Wyeth	150	NORTHEAST
Hammerman, Albert M	190	ST. LOUIS METROP.
Hammerman, Harley J	190	ST. LOUIS METROP.
Hammerman, Marc R	190	ST. LOUIS METROP.
Hammond, D. Wade	190	ST. LOUIS METROP.
Hammond, David T	190	ST. LOUIS METROP.
Hanaway, Joseph	190	ST. LOUIS METROP.
*Hancock, Thomas J	058	COLE
Handler, Fred P	058	COLE
Handler, Michael R	190	ST. LOUIS METROP.
Handoyo, Frans S	190	ST. LOUIS METROP.
Hanes, Lily A	190	ST. LOUIS METROP.
Hanks, Michael S	082	GREENE
Hanley, Thomas P	190	ST. LOUIS METROP.
Hanna, Hugh A	110	JOHNSON
Hannah, Hamner	125	METRO MED
Hannas, Ralston R	125	METRO MED
Hansbrough, Eugene T	034	B-W-R-C
Hansen, Thomas L	125	METRO MED
Hanson, E J	125	METRO MED
Hanson, Karl H	125	METRO MED
*Hanson, Lesley A	190	ST. LOUIS METROP.
Hanss, Armand W	082	GREENE
Hantman, Stephen L	190	ST. LOUIS METROP.
Hanto, Douglas W	190	ST. LOUIS METROP.
Hantz, Oscar	190	ST. LOUIS METROP.
Harbrecht, James J	125	METRO MED
Hardacre, Ruth A	125	METRO MED
Hardin, Wm B	190	ST. LOUIS METROP.
Harding, Clarke T	189	ST CHARLES-LINCOLN
Hardman, William A	082	GREENE
Hardy, David A	190	ST. LOUIS METROP.
Hardy, Guerdan	190	ST. LOUIS METROP.
Hardy, H. Malcolm	125	METRO MED
Hardy, Jeffery A	190	ST. LOUIS METROP.
Hardy, John W	125	METRO MED
Hardy, Patrick J	190	ST. LOUIS METROP.
Hardy, Stanton L	138	MINERAL AREA
Harell, Alex	190	ST. LOUIS METROP.
Hargis, James L	082	GREENE
Hari, Magaral S	102	JASPER
Harless, Morris S	125	METRO MED
Harlow, Richard J	125	METRO MED
Harmon, Ben C	082	GREENE
Harms, James F	214	WEST CENTRAL
Harms, Lawrence L	046	C-M-M-R
Harner, Casper G	030	BUCHANAN
Harper, Fleming B	190	ST. LOUIS METROP.
Harr, Patrick B	158	NORTHWEST
Harrin, Wm R	125	METRO MED
Harris, David J	125	METRO MED
Harris, Hugh G	082	GREENE
Harris, Hugh S	026	BOONE
Harris, Lanny W	125	METRO MED
Harris, Louis B	066	D-H-P-D
Harris, Robt J	026	BOONE
Harris, Weldon L	125	METRO MED
Harrison, Garth F	125	METRO MED
Harrison, Richard L	190	ST. LOUIS METROP.
Harrison, Thomas J	189	ST CHARLES-LINCOLN
Harrison, Winston E	026	BOONE
Harshman, David M	190	ST. LOUIS METROP.
Hart, L. Wayne	125	METRO MED
Hart, William M	190	ST. LOUIS METROP.
Hart, William G	190	ST. LOUIS METROP.
Hartman, Paul T	190	ST. LOUIS METROP.
Hartman, Richard A	190	ST. LOUIS METROP.
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Hartnett, Thomas D	ST. LOUIS METROP.	**190**
Hartstein, Jack	ST. LOUIS METROP.	**190**
Hartwig, Frederick H	METRO MED	**125**
Hartwig, Raymond W	METRO MED	**125**
Hartzler, Geoffrey O	METRO MED	**125**
Harvey, Harold D	GREENE	**082**
Harvey, Judith E	GREENE	**082**
Harwell, J. Larry	ST. LOUIS METROP.	**190**
Hasenmueller, James J	ST. LOUIS METROP.	**190**
Hasik, Karl J	ST. LOUIS METROP.	**190**
Hasler, Galen R	GREENE	**082**
Hastings, Mary V	AUDRAIN	**014**
Hastings, Thomas F	AUDRAIN	**014**
Hatfalvi, Bela I	ST. LOUIS METROP.	**190**
Hatlelid, J. Michael	ST. LOUIS METROP.	**190**
Haueisen, David C	ST. LOUIS METROP.	**190**
Haupt, Herbert A	ST. LOUIS METROP.	**190**
Hauser, Robert J	COLE	**058**
Hausheer, Herman J	METRO MED	**125**
Havaldar, Kanti L	NORTHWEST	**158**
Havey, John	BOONE	**026**
Haw, Marvin T	BOONE	**026**
Hawatmeh, Ibrahim S	ST. LOUIS METROP.	**190**
Hawatmeh, Sam S	ST. LOUIS METROP.	**190**
Hawk, Bray O	ST. LOUIS METROP.	**190**
Hawker, Wm D	ST. LOUIS METROP.	**190**
Hawkins, Calvin D	GREENE	**082**
Hawkins, Geo L	ST. LOUIS METROP.	**190**
Hawkins, John W	MSMA	**002**
Haycraft, Gordon L	CAPE GIRARDEAU	**042**
Hayden, Melvin R	LAKE OF THE OZARKS	**120**
Hayden, Richard E	ST. LOUIS METROP.	**190**
Hayek, Michael E	ST. LOUIS METROP.	**190**
Hayes, Kimberly W	METRO MED	**125**
Hayes, Lawrence L	CLAY-PLATTE	**050**
Hayes, Nancy J	SOUTH CENTRAL	**206**
Hayes, Paul W	BUCHANAN	**030**
Hayes, Stanley P	GREENE	**082**
Haynie, William W	WEST CENTRAL	**214**
Hazan, Joseph	ST. LOUIS METROP.	**190**
Hazen, Robt M	METRO MED	**125**
Hazuka, David F	METRO MED	**125**
Headrick, John A	ST. LOUIS METROP.	**190**
Heath, Jimmy D	SEMO	**202**
Hecker, Jos E	B-W-R-C	**034**
Hedge, S. Roy	METRO MED	**125**
Hedges, Richard C	CLAY-PLATTE	**050**
Heeb, Max A	SEMO	**202**
Hegde, Korgi V	ST. LOUIS METROP.	**190**
Heidbrier, Edward W	ST. LOUIS METROP.	**190**
Heim, Mary L	MSMA	**002**
Heimburger, Elizabeth M	BOONE	**026**
Heimburger, Richard A	BOONE	**026**
Heins, Donald E	BUCHANAN	**030**
Heins, James N	ST. LOUIS METROP.	**190**
Heinz, George	GREENE	**082**
Helfrich, Loring	SEMO	**202**
Helikson, Mary A	BOONE	**026**
Hellam, Duane C	GREENE	**082**
Heller, Randall L	ST. LOUIS METROP.	**190**
Hellerstein, Stanley	METRO MED	**125**
Helling, Thomas S	METRO MED	**125**
Hellman, Richard	METRO MED	**125**
Hellweg, Raymond W	ST. LOUIS METROP.	**190**
Helzberg, John H	METRO MED	**125**
Henry, Clarke L	METRO MED	**125**
Henry, Clarke L	METRO MED	**125**
Henry, Jos E	CLAY-PLATTE	**050**
Henry, Lawrence D	COLE	**058**
Henry, Mary M	METRO MED	**125**
Henry, Roy A	GREENE	**082**
Henson, Bruce E	METRO MED	**125**
Henzel, John H	BOONE	**026**
Herdoiza, Alfonso W	METRO MED	**125**
Herfkens, Kenneth D	GREENE	**082**
Herman, Robert L	METRO MED	**125**
Hernandez, J. Humberto	COLE	**058**
Hernandez, Salvador R	ST. LOUIS METROP.	**190**
Herrick, Thomas B	CLAY-PLATTE	**050**
Herrmann, Virginia M	ST. LOUIS METROP.	**190**
Hershey, Falls B	ST. LOUIS METROP.	**190**
Hertel, Ronald C	ST. LOUIS METROP.	**190**
Hervey, Wm H	METRO MED	**125**
Heryer, John W	METRO MED	**125**
Herzog, Godofredo M	ST. LOUIS METROP.	**190**
Herzog, Jacques A	ST. LOUIS METROP.	**190**
Hesker, Albert E	ST. LOUIS METROP.	**190**
Hess, John P	ST. LOUIS METROP.	**190**
Heutel, Lee B	ST. LOUIS METROP.	**190**
***Hevel, Robert W**	NORTHEAST	**150**
***Hey, Dennis J**	METRO MED	**125**
Hickey, James L	ST. LOUIS METROP.	**190**
Hicks, Frederick G	ST. LOUIS METROP.	**190**
Hicks, Robert S	ST. LOUIS METROP.	**190**
Hierholzer, Rebecca S	METRO MED	**125**
Higgins, Edward F	METRO MED	**125**
Higgins, Michael D	CAPE GIRARDEAU	**042**
Higgins, Philip C	ST. LOUIS METROP.	**190**
Highland, Thomas R	BOONE	**026**
Hilbert, Paul H	ST. LOUIS METROP.	**190**
Hildreth, H. Rommel	ST. LOUIS METROP.	**190**
Hill, Jack H	METRO MED	**125**
Hill, M. Robert	ST. LOUIS METROP.	**190**
Hill, Randy C	GREENE	**082**
Hill, Ronald T	SEMO	**202**
Hill, XaCadene A	ST. LOUIS METROP.	**190**
Hills, Joe E	GREENE	**082**
Hilton, Paul E	JASPER	**102**
Hinds, Paul A	GREENE	**082**
Hinds, Roy D	BOONE	**026**
Hindupur, Mohan R	BUCHANAN	**030**
Hink, Frederick W	METRO MED	**125**
Hinojosa, Luis A	OZARKS	**166**
Hinrichs, James H	ST. LOUIS METROP.	**190**
Hinson, Gary W	METRO MED	**125**
Hintze, Paul F	ST. LOUIS METROP.	**190**
Hironimus, John E	ST. LOUIS METROP.	**190**
Hirshberg, Gary E	ST. LOUIS METROP.	**190**
Hite, Dennis E	LACLEDE	**115**
Ho, Grinny H	SEMO	**202**
Ho, Judith E	ST. LOUIS METROP.	**190**
Hobbs, John E	ST. LOUIS METROP.	**190**
Hodge, Robt H	CLAY-PLATTE	**050**
Hodgson, Frank H	METRO MED	**125**
Hoech, Geo P	METRO MED	**125**
Hoehn, John P	ST. LOUIS METROP.	**190**
Hoelscher, Harold F	F-G-W	**074**
Hoeman, Michael D	GREENE	**082**
Hoeper, Samuel D	METRO MED	**125**
Hoeper, Samuel D	METRO MED	**125**
Hof, David G	METRO MED	**125**
***Hoffman, James E**	CAPE GIRARDEAU	**042**
Hoffman, Leanna M	NORTH CENTRAL	**148**
Hoffman, Mark J	ST. LOUIS METROP.	**190**
Hoffman, William F	ST. LOUIS METROP.	**190**
Hoffmann, Alan L	METRO MED	**125**
Hoffmann, Lee M	METRO MED	**125**
Hoffmann, Ronald E	ST. LOUIS METROP.	**190**
Hoffmann, Sandra S	ST. LOUIS METROP.	**190**
Hofmeister, Roger W	BOONE	**026**
Hofstatter, Leopold	ST. LOUIS METROP.	**190**
Hogan, Cornelius E	ST. LOUIS METROP.	**190**
Hogan, John R	ST. LOUIS METROP.	**190**
Hogan, Patrick A	ST. LOUIS METROP.	**190**
Hogan, Patrick C	ST. LOUIS METROP.	**190**
Hogue, Charles W	MSMA	**002**
Hoja, W Alex	B-W-R-C	**034**
Holand, Roy W	GREENE	**082**
Holbrook, C. R.	METRO MED	**125**
Holcomb, John K	CAPE GIRARDEAU	**042**
Holcombe, Faith H	MSMA	**002**
Holder, Barrett K	ST. LOUIS METROP.	**190**
Holder, Thos M	METRO MED	**125**
Holds, John B	ST. LOUIS METROP.	**190**
Holekamp, Timothy	BOONE	**026**
Holemon, R. Eugene	ST. LOUIS METROP.	**190**
Holland, Robt D	GREENE	**082**
Holleman, David N	METRO MED	**125**
Holley, Donald B	LAKE OF THE OZARKS	**120**
Hollinger, Lloyd A	METRO MED	**125**
Hollis, Richard W	GREENE	**082**
Hollo, Vencel W	ST. LOUIS METROP.	**190**
Hollocher, Richard J	ST. LOUIS METROP.	**190**
Holloway, Robert B	ST. LOUIS METROP.	**190**
Holman, Jos G	METRO MED	**125**
Holmes, David R	GREENE	**082**
Holmes, Nancy E	ST. LOUIS METROP.	**190**
Holmes, Richard A	BOONE	**026**
Holt, Peter S	METRO MED	**125**
Holtmann, Barbel	ST. LOUIS METROP.	**190**
Holtmeier, Douglas L	JEFFERSON	**106**

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Holton, Edward B	METRO MED	125
Holtz, Alan S	ST. LOUIS METROP.	190
Holtz, Sumner	ST. LOUIS METROP.	190
Holzem, Craig S	F-G-W	074
Honaas, Trygve O	CAPE GIRARDEAU	042
***Honderick, Richard T**	GREENE	082
Honeycutt, Pamela J	BOONE	026
Hood, Roger W	METRO MED	125
Hookerman, Bruce J	ST. LOUIS METROP.	190
Hooper, Anthony C	ST. LOUIS METROP.	190
Hoos, Gary L	GREENE	082
Hooshmand, Ahmad	COLE	058
Hopkins, James P	METRO MED	125
Hopkins, T. Spencer	PETTIS	178
Hopkins, Thos J	PETTIS	178
Horan, John J	ST. LOUIS METROP.	190
Horenstein, Simon	ST. LOUIS METROP.	190
Horn, Paul C	CAPE GIRARDEAU	042
Hornbostel, Phillip M	PETTIS	178
Horner, John L	ST. LOUIS METROP.	190
Hornig, Gregory W	METRO MED	125
Hornstra, Robijn K	METRO MED	125
Horochowski, Alejandro	PETTIS	178
Horton, Bill G	GREENE	082
Horton, James D	GREENE	082
Horwitz, Irwin B	ST. LOUIS METROP.	190
Hoskins, R. Bruce	METRO MED	125
Hosler, Mark W	CAPE GIRARDEAU	042
Houck, William E	ST. LOUIS METROP.	190
Houttuin, Erik	JEFFERSON	106
Hover, Alexander R	GREENE	082
Howard, Campbell P	METRO MED	125
Howard, Richard J	MSMA	002
Howe, Albert L	ST. LOUIS METROP.	190
Howell, Billy D	GRAND RIVER	078
Howell, David T	MSMA	002
Howitt, William J	GREENE	082
Hoxworth, Gerald M	AUDRAIN	014
Hoye, Robert C	PERRY-STE GENEVIEVE	174
Hrabik, Brent	NORTHWEST	158
Hruska, Keith A	ST. LOUIS METROP.	190
Hruza, George J	ST. LOUIS METROP.	190
Hu, Raymond J	ST CHARLES-LINCOLN	189
Hubbard, Sally L	GREENE	082
Hubbell, Marius M	METRO MED	125
Hubert, John P	ST. LOUIS METROP.	190
Hubert, John W	ST. LOUIS METROP.	190
Huck, Richard F	ST. LOUIS METROP.	190
Huckstep, Robt A	MINERAL AREA	138
Huddleston, Charles B	MSMA	002
Hudgens, Richard W	ST. LOUIS METROP.	190
Hudson, Randall B	METRO MED	125
Huewe, Douglas A	GREENE	082
Huff, Kalaichelvi R	JASPER	102
Huffaker, William H	ST. LOUIS METROP.	190
Huffman, Thos L	SOUTH CENTRAL	206
Hufft, Robert E	GREENE	082
Huggins, Albert M	ST. LOUIS METROP.	190
Hughes, Derek	BOONE	026
Hughes, Judson M	BUCHANAN	030
Hughes, Michael F	METRO MED	125
Hughes, Robt G	ST. LOUIS METROP.	190
Huk, Stephen G	CLAY-PLATTE	050
Hulbert, Laura R	ST. LOUIS METROP.	190
Hull, Timothy A	METRO MED	125
Hulstra, Johannes F	GREENE	082
Hummel, Anton J	ST. LOUIS METROP.	190
Hummel, Wm C	ST. LOUIS METROP.	190
Humphrey, James D	NORTHWEST	158
Humphrey, Loren J	BOONE	026
Humphreys, Edward T	BOONE	026
Humphreys, William	BUCHANAN	030
Hunkeler, John D	METRO MED	125
Hunleth, Frank E	ST. LOUIS METROP.	190
Hunsley, Perry U	TRI-LAKES	208
Hunt, Robert S	CAPE GIRARDEAU	042
***Hunter, Harlen C**	ST. LOUIS METROP.	190
Hunter, James K	NORTHWEST	158
Hunzicker, Warren J	METRO MED	125
Huq, MD N	AUDRAIN	014
Hurley, Joseph J	ST. LOUIS METROP.	190
Hurly, Michael P	JASPER	102
Hurst, Wilfred W	JASPER	102
Husain, S. Arshad	BOONE	026
Huse, William J	METRO MED	125
Huss, Randall D	MID-MISSOURI	135
Hustead, Russell M	METRO MED	125
Husted, Frederick C	GREENE	082
Huster, Robert M	MID-MISSOURI	135
Huston, Kent A	METRO MED	125
Hutchinson, William B	ST. LOUIS METROP.	190
Hyde, Lawrence L	METRO MED	125
Hyde, Rita M	METRO MED	125

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Iacobucci, John J	MSMA	002
Icaza, Ramiro	CAPE GIRARDEAU	042
Ide, Carl H	BOONE	026
Ide, Lucien W	BUCHANAN	030
Idstrom, Mark E	METRO MED	125
Ikeda, Shigemasa	ST. LOUIS METROP.	190
Imes, Elvin D	NORTHWEST	158
Inciardi, Marc F	METRO MED	125
Ingham, Walton C	METRO MED	125
Ingram, Donald R	ST. LOUIS METROP.	190
Inman, Max M	ST. LOUIS METROP.	190
Inniss, Rosalyn E	METRO MED	125
Ip, Aidan W	ST. LOUIS METROP.	190
Ippensen, John H	GREENE	082
***Irinyi, Elmer T**	BUCHANAN	030
Irvin, William S	BOONE	026
Irvine, John W	METRO MED	125
Irwig, Fred	METRO MED	125
Isaac, Anita M	OZARKS	166
***Isaacs, Victor E**	CAPE GIRARDEAU	042
Ishida, Yasuo	ST. LOUIS METROP.	190
Isserman, Michael J	ST. LOUIS METROP.	190
Ittner, Geo W	ST. LOUIS METROP.	190
Ivins, Gregory K	CALLAWAY	038
Iwane, Akira	ST. LOUIS METROP.	190
Izmirlian, Grant	ST. LOUIS METROP.	190

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Jablonski, Raymond C	ST. LOUIS METROP.	190
***Jacks, Richard K**	BUCHANAN	030
Jackson, Darwin C	ST. LOUIS METROP.	190
Jackson, Dorothy J	METRO MED	125
Jackson, Jay A	METRO MED	125
Jackson, Mary Anne	METRO MED	125
Jackson, Max G	METRO MED	125
Jackson, Roger P	CLAY-PLATTE	050
Jackson, Vernon B	CALLAWAY	038
Jacob, Karl A	ST. LOUIS METROP.	190
Jacob, Kenneth M	METRO MED	125
Jacobs, Chas C	ST. LOUIS METROP.	190
Jacobs, Morton	METRO MED	125
Jacobs, Walter H	METRO MED	125
Jaeger, Jos N	CAPE GIRARDEAU	042
Jahanian, Iraj	GREENE	082
Jain, Savitri G	ST. LOUIS METROP.	190
Jain, Sumer C	ST. LOUIS METROP.	190
Jamaluddin, Mohideen A	JEFFERSON	106
James, Elizabeth J	BOONE	026
James, Kathleen M	ST CHARLES-LINCOLN	189
James, Otis E	METRO MED	125
James, Ronald C	BOONE	026
Jameson, James E	GREENE	082
Jamroz, Greg A	F-G-W	074
Jana, Francis X	MSMA	002
Janeczko, Gregory F	GREENE	082
Jantsch, Deborah A	METRO MED	125
Jantz, Keith	METRO MED	125
Jarvis, Cathy C	ST. LOUIS METROP.	190
Jary, Mark L	GREENE	082
Javdan, Ron	ST. LOUIS METROP.	190
Jayamanne, Damasus S	COLE	058
Jean, J T	ST. LOUIS METROP.	190
Jedlinski, Michael T	CAPE GIRARDEAU	042
Jefferis, Kenneth R	NORTHWEST	158
Jelley, V. Carl	METRO MED	125
Jenkins, David C	METRO MED	125
Jenkins, Edward R	MID-MISSOURI	135
Jennett, J H	METRO MED	125
Jennett, Richard B	COLE	058
Jensen, Joshua E	ST. LOUIS METROP.	190
Jensen, Joshua E	ST. LOUIS METROP.	190
Jernstrom, Vance R	METRO MED	125
Jobe, Chas L	GREENE	082
Johans, Thomas G	ST. LOUIS METROP.	190
Johnson, C. L.	METRO MED	125

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Johnson, Charles J	ST. LOUIS METROP.	190
Johnson, Chas S	JOHNSON	110
Johnson, Dallas A	METRO MED	125
Johnson, E D	CAPE GIRARDEAU	042
Johnson, Earl W	CAPE GIRARDEAU	042
Johnson, Frank E	ST. LOUIS METROP.	190
Johnson, Fritz M	GREENE	082
Johnson, Gareth R	METRO MED	125
Johnson, Gordon L	JEFFERSON	106
Johnson, James S	METRO MED	125
Johnson, Jeffrey R	GREENE	082
Johnson, Jos C	GREENE	082
Johnson, Joseph E	METRO MED	125
Johnson, Joy A	METRO MED	125
Johnson, Kevin T	ST. LOUIS METROP.	190
Johnson, Lent C	NORTHEAST	150
Johnson, Michael K	ST. LOUIS METROP.	190
Johnson, Randy G	ST. LOUIS METROP.	190
Johnson, Richard E	BOONE	026
Johnson, Richard L	METRO MED	125
Johnson, Robert D	GREENE	082
Johnson, Steven M	ST. LOUIS METROP.	190
Johnson, Thos M	METRO MED	125
Johnson, Warford B	GREENE	082
Johnson, Warford B	GREENE	082
Johnson, Warren L	METRO MED	125
Johnson, Wm F	GREENE	082
Johnston, Glen P	ST. LOUIS METROP.	190
Johnston, Jos L	GREENE	082
Johnston, Richard	ST. LOUIS METROP.	190
Johnstone, John T	ST. LOUIS METROP.	190
Jolly, Ben L	AUDRAIN	014
Jolly, Benj N	AUDRAIN	014
Jonas, Harry S	METRO MED	125
Jones, Anne L	MSMA	002
Jones, Bruce N	ST. LOUIS METROP.	190
Jones, Dorothy J	ST. LOUIS METROP.	190
Jones, Edna M	HENRY	086
Jones, Edward S	WEST CENTRAL	214
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Mosbacher, Hugh E	METRO MED	125
Mosby, Larry D	BOONE	026
Moseley, Brad	LAKE OF THE OZARKS	120
Moseley, F. Thomas	GREENE	082
Moses, Robert A	ST. LOUIS METROP.	190
Mosley, Julian C	ST. LOUIS METROP.	190
Moss, Paul	METRO MED	125
Mossie, Raymond D	CLAY-PLATTE	050
Motchan, Dennis G	ST. LOUIS METROP.	190
Mothershead, John L	BUCHANAN	030
Motier, Thomas H	ST. LOUIS METROP.	190
Mowrey, Wm O	ST. LOUIS METROP.	190
Moya, Carlos E	BUCHANAN	030
Muckerman, Richard C	ST. LOUIS METROP.	190
Muckerman, Richard I	ST. LOUIS METROP.	190
Muegge, F. David	GREENE	082
Muelleman, Peter J	METRO MED	125
Mueller, Adolph R	JASPER	102
Mueller, Clarence E	ST. LOUIS METROP.	190
Mueller, Howard A	ST. LOUIS METROP.	190
Mueller, John J	ST. LOUIS METROP.	190
Mueller, Jos A	ST. LOUIS METROP.	190
Mueller, Martin J	METRO MED	125
Mueller, Morris A	ST. LOUIS METROP.	190
Mueller, Randall E	BOONE	026
Muhammud, Faquir	ST. LOUIS METROP.	190
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Mujica, Patricio H	BUCHANAN	030
Mukharji, Jhulan	METRO MED	125
Mulder, George D	BUCHANAN	030
Mullarky, Wilbur A	ST. LOUIS METROP.	190
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Mullins, Bernard L	CLAY-PLATTE	050
Mullins, John E	ST. LOUIS METROP.	190
Mundy, William L	METRO MED	125
Munger, Michael L	METRO MED	125
Munro, John S	MSMA	002
Munyan, Earl A	METRO MED	125
Muraywid, Ahmad H	AUDRAIN	014
Murdock, Nathaniel	ST. LOUIS METROP.	190
Murphy, Daniel J	ST. LOUIS METROP.	190
Murphy, J. Peter	ST. LOUIS METROP.	190
Murphy, James A	BUCHANAN	030
Murphy, John P	METRO MED	125
Murphy, Wm A	ST. LOUIS METROP.	190
Murray, Eric	COLE	058
Murrell, H. Jerry	BOONE	026
Muscato, Joseph J	BOONE	026
Muscato, Mary S	BOONE	026
Muschany, Norman K	ST. LOUIS METROP.	190
Mustoe, Thomas A	ST. LOUIS METROP.	190
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Myers, Carl M	METRO MED	125
Myers, Duane E	JASPER	102
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Myers, Geo H	METRO MED	125
Myers, Ivan T	ST. LOUIS METROP.	190
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Myers, John S	METRO MED	125
Myron, Mark C	METRO MED	125

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Nagel, Steven A	ST. LOUIS METROP.	190
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Nagy, Al L	B-W-R-C	034
Nahm, Chung C	ST. LOUIS METROP.	190
Nakra, Bharat Raj	ST. LOUIS METROP.	190
Nakra, Rashmi R	ST. LOUIS METROP.	190
Nanson, Duane	BOONE	026
Narayan, Dilip L	ST. LOUIS METROP.	190
Narkiewicz, Lawrence S	ST. LOUIS METROP.	190
Naseer, Riaz A	ST. LOUIS METROP.	190
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Naunheim, Keith S	ST. LOUIS METROP.	190
Nayar, Gopal K	ST. LOUIS METROP.	190
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Near, David M	ST. LOUIS METROP.	190
Neblett, Lewis M	GREENE	082
Neighbor, Ernest H	METRO MED	125
Neihart, Robert E	METRO MED	125
Nelson, Bentley A	METRO MED	125
Nelson, David E	GREENE	082
Nelson, Donald C	GREENE	082
Nelson, J. Roger	ST. LOUIS METROP.	190
Nelson, Paul W	METRO MED	125
Nelson, Richard E	METRO MED	125
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Nesselrode, John H	METRO MED	125
Neu, Leo T	GREENE	082
Neu, Leo T	GREENE	082
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Nguyen, Helen T	BUCHANAN	030
Nicholas, Stephen P	ST. LOUIS METROP.	190
Nicholis, G. Ronald	METRO MED	125
Nichols, David A	CALLAWAY	038
Nichols, W. Kirt	BOONE	026
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Nierling, Dean A	BOONE	026
Niesen, Anna R	ST. LOUIS METROP.	190
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Niesen, Thomas E	ST. LOUIS METROP.	190
Nieuwenhuizen, Maarten	BOONE	026
Nigh, Chas A	ST. LOUIS METROP.	190
Nigro, Thomas L	METRO MED	125
Nishi, Toshio	ST. LOUIS METROP.	190
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Nix, J. Gustavo	D-H-P-D	066
Nixon, Edward E	GRAND RIVER	078
Noback, Richardson K	METRO MED	125
Nolan, Chas J	ST. LOUIS METROP.	190
Nolph, Georgia J	BOONE	026
Nolph, Karl D	BOONE	026
Noltensmeyer, Milton H	METRO MED	125
Nomura, Roy M	ST. LOUIS METROP.	190
Nordlicht, Scott M	ST. LOUIS METROP.	190
Norland, Chas C	ST. LOUIS METROP.	190
Nouhan, Joseph G	ST. LOUIS METROP.	190
Nourbakhsh, Mahmoud M	CLAY-PLATTE	050
Nouri, Hassan	ST. LOUIS METROP.	190
Novack, Mark A	ST. LOUIS METROP.	190
Nowotny, Thomas J	ST. LOUIS METROP.	190
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Nulton, Carnie C	METRO MED	125
Nussbaum, Larry	CLAY-PLATTE	050
Nwaobasi, Sam	ST. LOUIS METROP.	190
Nyazee, Muhammad A	ST. LOUIS METROP.	190

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O'Connor, John J	F-G-W	074
O'Connor, Robert J	ST. LOUIS METROP.	190
O'Donnell, Francis E	ST. LOUIS METROP.	190
O'Dowd, Mary K	MSMA	002
O'Farrell, Thos P	METRO MED	125
O'Hearne, John J	METRO MED	125
O'Keefe, James H	METRO MED	125
O'Keefe, Joseph D	ST. LOUIS METROP.	190
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O'Kell, Richard T	METRO MED	125
O'Malley, James F	METRO MED	125

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O'Neal, Patricia L	**190**	ST. LOUIS METROP.
O'Neil, James H	**125**	METRO MED
O'Neil, Jerome H	**190**	ST. LOUIS METROP.
O'Reilly, D. Elliott	**190**	ST. LOUIS METROP.
O'Sullivan, Danl F	**190**	ST. LOUIS METROP.
O'Toole, Patrick M	**125**	METRO MED
Oakley, Margaret M	**190**	ST. LOUIS METROP.
Occeno, Victor G	**166**	OZARKS
Ockner, Samuel A	**190**	ST. LOUIS METROP.
Oehler, William F	**042**	CAPE GIRARDEAU
Ohlms, David L	**190**	ST. LOUIS METROP.
Ojascastro, Alejandro C	**190**	ST. LOUIS METROP.
Ojile, Joseph M	**190**	ST. LOUIS METROP.
Oleson, Gale B	**125**	METRO MED
Olive, G. Chapman	**082**	GREENE
Olive, Geo C	**166**	OZARKS
Olive, Paul M	**082**	GREENE
Oliver, G. Charles	**002**	MSMA
Oliver, George A	**138**	MINERAL AREA
Olk, R. Joseph	**190**	ST. LOUIS METROP.
Olsen, Teresa A	**082**	GREENE
Olson, E. Rule	**082**	GREENE
Olson, James H	**050**	CLAY-PLATTE
Olson, Lloyd C	**125**	METRO MED
Olson, Richard O	**189**	ST CHARLES-LINCOLN
Olson, Robert J	**082**	GREENE
Omell, Gary H	**190**	ST. LOUIS METROP.
Ong, Eng L	**190**	ST. LOUIS METROP.
Ong, Ofelia S	**190**	ST. LOUIS METROP.
Onken, Henry D	**190**	ST. LOUIS METROP.
Oppenheimer, Henry E	**190**	ST. LOUIS METROP.
Opper, Susan E	**125**	METRO MED
Oppermann, Karen J	**125**	METRO MED
Orgel, S. Michael	**190**	ST. LOUIS METROP.
Oro, John J	**026**	BOONE
Orsay, Paul K	**190**	ST. LOUIS METROP.
Ortbals, David W	**190**	ST. LOUIS METROP.
Ortega, Steven A	**102**	JASPER
Orth, O. Gerald	**026**	BOONE
Ortiguero, Leopoldo M	**190**	ST. LOUIS METROP.
Ortmeyer, Leroy F	**190**	ST. LOUIS METROP.
Osbourn, Richard A	**038**	CALLAWAY
Osgood, Brian M	**125**	METRO MED
Ossman, Julian A	**058**	COLE
Ost, Mark D	**125**	METRO MED
Ostapowicz, Frank	**190**	ST. LOUIS METROP.
Ostapowicz, Tamara L	**190**	ST. LOUIS METROP.
Ostergaard, Daniel J	**125**	METRO MED
Ostrow, Bridget F	**042**	CAPE GIRARDEAU
Ostrow, Louis B	**042**	CAPE GIRARDEAU
Othmer, Ekkehard	**050**	CLAY-PLATTE
Ott, F. Thomas	**190**	ST. LOUIS METROP.
Ott, Harold J	**190**	ST. LOUIS METROP.
Ott, William J	**190**	ST. LOUIS METROP.
Otten, Joseph V	**190**	ST. LOUIS METROP.
Otto, Thomas G	**042**	CAPE GIRARDEAU
Otto, William J	**082**	GREENE
Ouellette, David F	**150**	NORTHEAST
Ovens, Lisa	**082**	GREENE
Overend, Don S	**082**	GREENE
Overesch, Harry B	**125**	METRO MED
Owen, James W	**190**	ST. LOUIS METROP.
Owen, Robt F	**190**	ST. LOUIS METROP.
Owens, Robt H	**125**	METRO MED
Owens, William D	**190**	ST. LOUIS METROP.
Ozar, Milton B	**125**	METRO MED
Ozenberger, Larry A	**054**	CLINTON
Ozmat, Orhan M	**190**	ST. LOUIS METROP.

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Pacheco, Jose M	**082**	GREENE
Packman, Paul	**190**	ST. LOUIS METROP.
Packman, Robt C	**190**	ST. LOUIS METROP.
Padilla, Pedro C	**189**	ST CHARLES-LINCOLN
Padilla, Teresita C	**190**	ST. LOUIS METROP.
Padula, Richard T	**125**	METRO MED
Paez, Mauro A	**190**	ST. LOUIS METROP.
Paine, Robert	**190**	ST. LOUIS METROP.
Painter, Andrew E	**202**	SEMO
Painter, Lattie B	**170**	PEMISCOT
Pakula, Sidney F	**125**	METRO MED
Palazola, Joseph M	**125**	METRO MED
Palcheff, Chris L	**082**	GREENE
Palen, James E	**042**	CAPE GIRARDEAU
Palenske, Robt L	**070**	DUNKLIN
Paletta, Christian E	**190**	ST. LOUIS METROP.
Paletta, Francis X	**190**	ST. LOUIS METROP.
Paletta, Frank	**190**	ST. LOUIS METROP.
Paletta, Theodore L	**190**	ST. LOUIS METROP.
Paletta, Victor L	**190**	ST. LOUIS METROP.
***Palmer, Allen S**	**190**	ST. LOUIS METROP.
Palmer, Russell H	**150**	NORTHEAST
Palmer, Stephen M	**190**	ST. LOUIS METROP.
Pancoast, Charles H	**042**	CAPE GIRARDEAU
Panek, Judy L	**125**	METRO MED
Paone, Douglas B	**125**	METRO MED
Pappalardo, Carlos	**190**	ST. LOUIS METROP.
Papreck, K T	**198**	SALINE
Paradelo, Jorge C	**125**	METRO MED
Pardo, Leopoldo P	**190**	ST. LOUIS METROP.
Pardo, Lourdes S	**190**	ST. LOUIS METROP.
Parelman, Allen G	**125**	METRO MED
Parelman, Joseph J	**125**	METRO MED
Parikh, Sharad P	**190**	ST. LOUIS METROP.
Parikh, Smita S	**190**	ST. LOUIS METROP.
Paris, Wm H	**190**	ST. LOUIS METROP.
Park, Bert E	**082**	GREENE
Park, Tae S	**002**	MSMA
Park, Wm I	**082**	GREENE
Parker, Arthur C	**034**	B-W-R-C
Parker, Brent M	**026**	BOONE
Parker, Craig A	**125**	METRO MED
Parker, Joseph C	**125**	METRO MED
Parker, Kim E	**125**	METRO MED
Parker, Thos W	**190**	ST. LOUIS METROP.
Parker, Wm	**190**	ST. LOUIS METROP.
Parkins, George K	**125**	METRO MED
Parks, Charles	**190**	ST. LOUIS METROP.
Parks, Deborah L	**190**	ST. LOUIS METROP.
Parra, Raul O	**190**	ST. LOUIS METROP.
Parrish, Steven T	**125**	METRO MED
Parsons, Clyde W	**082**	GREENE
Parsons, Richard P	**190**	ST. LOUIS METROP.
Partamian, Krikor O	**030**	BUCHANAN
Partap, Prabha	**190**	ST. LOUIS METROP.
Parulekar, Dilip G	**038**	CALLAWAY
Parwatikar, Sadashiv D	**190**	ST. LOUIS METROP.
Paskar, Larry D	**190**	ST. LOUIS METROP.
Paskon, Seth	**135**	MID-MISSOURI
Passanante, Bartholomew M	**190**	ST. LOUIS METROP.
Patel, Ashokkumar B	**190**	ST. LOUIS METROP.
Patel, Bipin T	**030**	BUCHANAN
Patel, Hansa N	**078**	GRAND RIVER
Patel, Indu B	**106**	JEFFERSON
Patel, Natu B	**078**	GRAND RIVER
Patel, Prakesh B	**030**	BUCHANAN
Patel, Raman J	**030**	BUCHANAN
Patrick, Roman L	**190**	ST. LOUIS METROP.
Patterson, Donald C	**026**	BOONE
Patterson, Donald R	**102**	JASPER
Patterson, Grover S	**102**	JASPER
Pattison, Charles P	**125**	METRO MED
Patty, Carl F	**034**	B-W-R-C
Paulson, Gordon S	**030**	BUCHANAN
Pavlovich, Andrew S	**125**	METRO MED
Pavlu, Robert R	**118**	LAFAYETTE-RAY
Pawsat, John E	**125**	METRO MED
Payne, David E	**026**	BOONE
Payne, John W	**026**	BOONE
Payne, Joseph R	**002**	MSMA
Payne, Meredith C	**190**	ST. LOUIS METROP.
Pearce, Eugene W	**125**	METRO MED
Pearlman, Alan L	**190**	ST. LOUIS METROP.
Pearse, Carlton S	**190**	ST. LOUIS METROP.
Pearse, Roy W	**214**	WEST CENTRAL
Pearson, Thomas C	**082**	GREENE
Pearson, William E	**190**	ST. LOUIS METROP.
Peck, William A	**190**	ST. LOUIS METROP.
Peden, Burnet W	**190**	ST. LOUIS METROP.
Peden, Virginia H	**190**	ST. LOUIS METROP.
Peete, Don C	**125**	METRO MED
Pehlman, Jos E	**070**	DUNKLIN
Peick, Ann C	**034**	B-W-R-C
Peigh, Pamela S	**190**	ST. LOUIS METROP.
Pelican, George	**190**	ST. LOUIS METROP.
Pendell, Paul W	**125**	METRO MED
Pendergrass, Kelly B	**125**	METRO MED
Penilla, Antonio R	**190**	ST. LOUIS METROP.
Penkoske, Michaele M	**189**	ST CHARLES-LINCOLN
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Penninger, William H	GREENE	082
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Pereira, MaryBeth	ST. LOUIS METROP.	190
Perez, Adamor R	ST. LOUIS METROP.	190
Perez, Blanca M	ST. LOUIS METROP.	190
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Perez, Jeannie O	ST. LOUIS METROP.	190
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Perll, Rita D	METRO MED	125
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Pernoud, Joan M	ST. LOUIS METROP.	190
Pernoud, Michael F	ST. LOUIS METROP.	190
Perry, Michael C	BOONE	026
Perryman, John C	METRO MED	125
Perryman, Kathy M	METRO MED	125
Peters, Walter R	BOONE	026
Petersen, Larry D	GREENE	082
Petersen, Michael T	BOONE	026
Peterson, Carl M	METRO MED	125
Peterson, Craig A	GREENE	082
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Peterson, John E	METRO MED	125
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Pfefer, Leland U	BOONE	026
Pfeffer-Hurwitz, Judith	METRO MED	125
Pfefferkorn, David A	SEMO	202
Phanijphand, Suwan	B-W-R-C	034
Philgreen, Donald E	METRO MED	125
Phillips, Abraham M	ST. LOUIS METROP.	190
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Phillips, Eric D	METRO MED	125
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Phillips, Wm J	ST. LOUIS METROP.	190
Philpott, Gordon W	ST. LOUIS METROP.	190
Pickard, Clarence M	BOONE	026
Pickard, Nicholas S	METRO MED	125
Pickens, Andrew T	ST. LOUIS METROP.	190
Picker, Selwyn	ST. LOUIS METROP.	190
Pickering, Lee I	METRO MED	125
Picus, Joel	MSMA	002
Piebenga, Larry W	METRO MED	125
Piehler, Jeffrey M	METRO MED	125
Pifer, Lawrence H	BUCHANAN	030
Pignotti, Blase J	ST. LOUIS METROP.	190
Piker, K. Dewayne	GREENE	082
Pimentel, Esperanza M	ST. LOUIS METROP.	190
Pinckley, James N	GREENE	082
Pineda, Hector O	ST. LOUIS METROP.	190
Pingelton, William B	BOONE	026
Pingleton, William W	CLAY-PLATTE	050
Pinkerton, Joe A	METRO MED	125
Piontek, James F	CLAY-PLATTE	050
Piontek, Jerome G	ST. LOUIS METROP.	190
Piper, August T	ST. LOUIS METROP.	190
Piper, Donald K	METRO MED	125
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Pitsinger, N. Bruce	ST. LOUIS METROP.	190
Pittman, David L	BOONE	026
Pittman, Gerald R	ST. LOUIS METROP.	190
Pittman, Susan	ST. LOUIS METROP.	190
Pittmann, Thomas	ST. LOUIS METROP.	190
Place, Howard M	MID-MISSOURI	135
Place, Kenneth C	METRO MED	125
Platz, John H	GRAND RIVER	078
Plax, Steven I	ST. LOUIS METROP.	190
Plowman, Edward M	NORTHEAST	150
Podrecca, Guido I	GREENE	082
Poger, Marshall E	ST. LOUIS METROP.	190
Poggemeier, Wm H	ST CHARLES-LINCOLN	189
Pogson, George W	METRO MED	125
Pohl, David L	ST. LOUIS METROP.	190
Pojanasomboon, Pichat	MID-MISSOURI	135
Politi, Gregory B	METRO MED	125
Politte, Lenard L	BOONE	026
Pomphrey, Martin M	ST. LOUIS METROP.	190
Pompushko, Rosalie	METRO MED	125
Pon, Marcelino	ST. LOUIS METROP.	190
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Poonawala, Huseni E	METRO MED	125
Popp, Dennis A	ST. LOUIS METROP.	190
Porter, Charles B	METRO MED	125
Porter, Michael J	METRO MED	125
Porter, Susan S	METRO MED	125
Porter, Walter N	METRO MED	125
Portnoff, Lee S	ST. LOUIS METROP.	190
Portnoy, Jay M	MSMA	002
Porubsky, Gary L	CLAY-PLATTE	050
Post, Stephen L	ST. LOUIS METROP.	190
Postma, George S	METRO MED	125
Potashnick, Robert	ST. LOUIS METROP.	190
Pottenger, L. Kenneth	JASPER	102
Potter, Caryl A	BUCHANAN	030
Potter, Reese H	ST. LOUIS METROP.	190
Potts, Dan E	ST. LOUIS METROP.	190
Potts, Donald A	METRO MED	125
Potts, Fred E	GREENE	082
Potts, Gregory A	F-G-W	074
Powell, Alan E	METRO MED	125
Powell, Edwin M	GREENE	082
Powell, John A	ST. LOUIS METROP.	190
Powell, Kenneth R	GREENE	082
Powell, Lisa G	GREENE	082
Powers, Catherine A	METRO MED	125
Prater, Bill G	GREENE	082
Prater, Kimberley A	GREENE	082
Prater, Thomas G	GREENE	082
Prather, William R	CLAY-PLATTE	050
Prelutsky, David J	ST. LOUIS METROP.	190
Prensky, Arthur L	ST. LOUIS METROP.	190
Presley, Jimmy C	GREENE	082
Preston, Bruce E	SOUTH CENTRAL	206
Previti, Vincent	GREENE	082
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Seshumurty, Vimala	METRO MED	125
Sessions, Donald G	ST. LOUIS METROP.	190
Sexton, Daniel L	ST. LOUIS METROP.	190
Shackter, Bruce I	GREENE	082
Shaeffer, James T	GREENE	082
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Shagets, Frank W	JASPER	102
Shah, Anwar	ST. LOUIS METROP.	190
Shah, Jayendra H	BOONE	026
Shah, Jitendra P	ST. LOUIS METROP.	190
Shah, Modaser	ST. LOUIS METROP.	190
Shah, Narendra	BUCHANAN	030
Shah, Ramesh R	JASPER	102
Shah, Sheila	BUCHANAN	030
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Shaikun, Gerald L	ST. LOUIS METROP.	190
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Shaner, Thomas P	ST. LOUIS METROP.	190
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Shannon, Vickie R	MSMA	002
Shapero, James A	BOONE	026
Shapiro, A. James	GREENE	082
Shapiro, Craig S	MSMA	002
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Shapleigh, John B	ST. LOUIS METROP.	190
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Sharma, Janardana N	METRO MED	125
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Shaw, Richard C	ST. LOUIS METROP.	190
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Shea, James G	F-G-W	074
Sheahon, John A	METRO MED	125
Shealy, C. Norman	GREENE	082
Shechter, Nathan	METRO MED	125
Sheehan, Michael B	METRO MED	125
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Shehadi, Sameer I	190	ST. LOUIS METROP.
Shelden, Russell D	125	METRO MED
Shell, William C	202	SEMO
Shelley, William C	125	METRO MED
Shelton, Becky R	190	ST. LOUIS METROP.
Shelton, R. Wayne	082	GREENE
Shen, Anthony S	190	ST. LOUIS METROP.
Shen, Jerome T	190	ST. LOUIS METROP.
Shen, Winston W	190	ST. LOUIS METROP.
Sher, Allyn L	026	BOONE
Sheridan, John J	190	ST. LOUIS METROP.
Sherman, W. Gary	190	ST. LOUIS METROP.
Sherrod, Duane W	102	JASPER
*Sherrod, Glenn M	190	ST. LOUIS METROP.
Sherwin, Charles S	190	ST. LOUIS METROP.
Sheverini, James A	125	METRO MED
Shevlin, Chas F	030	BUCHANAN
Shieber, Wm	190	ST. LOUIS METROP.
Shields, John B	190	ST. LOUIS METROP.
Shields, Lawrence S	082	GREENE
Shifrin, Alexander	125	METRO MED
Shimshak, Thomas M	125	METRO MED
Shine, Thomas E	190	ST. LOUIS METROP.
Shinn, Michael E	050	CLAY-PLATTE
*Shipman, Wade M	082	GREENE
Shitut, Ravindra V	190	ST. LOUIS METROP.
Shively, Raymond E	190	ST. LOUIS METROP.
Shively, Robert A	190	ST. LOUIS METROP.
Shockley, Clarence J	125	METRO MED
Shook, John W	125	METRO MED
Shore, Bernard L	190	ST. LOUIS METROP.
Short, Charles D	190	ST. LOUIS METROP.
Short, Howard N	074	F-G-W
Shoss, Milton	042	CAPE GIRARDEAU
Shoults, Nicholas F	082	GREENE
Shroff, Kumkum	190	ST. LOUIS METROP.
Shuey, Herbert H	125	METRO MED
Shull, G D	058	COLE
Shultz, Thomas M	082	GREENE
Shuman, Joseph S	190	ST. LOUIS METROP.
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Shyken, Herman	190	ST. LOUIS METROP.
Sicard, Gregorio A	190	ST. LOUIS METROP.
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Siddiqui, Farzanna Q	190	ST. LOUIS METROP.
Siddiqui, Jawed H	190	ST. LOUIS METROP.
Sides, Stanley D	042	CAPE GIRARDEAU
Siegel, Barry A	190	ST. LOUIS METROP.
Siegel, Carl D	125	METRO MED
Siegel, Charles	050	CLAY-PLATTE
Siemers, Geo E	190	ST. LOUIS METROP.
Siesener, Herbert H	190	ST. LOUIS METROP.
Sigmund, Charles J	190	ST. LOUIS METROP.
Sigmund, Charles A	190	ST. LOUIS METROP.
Silber, Sherman J	190	ST. LOUIS METROP.
Siler, Thomas M	189	ST CHARLES-LINCOLN
*Sill, William	189	ST CHARLES-LINCOLN
Silliman, York E	030	BUCHANAN
Silsby, Harry D	082	GREENE
Silver, Bernd	190	ST. LOUIS METROP.
Silver, Donald	026	BOONE
Silverberg, Bruce	002	MSMA
Silverberg, Charles	190	ST. LOUIS METROP.
Silvers, L. Michael	002	MSMA
Simmons, Donald D	125	METRO MED
Simmons, Jess S	102	JASPER
Simmons, John L	125	METRO MED
Simo, Frank	190	ST. LOUIS METROP.
Simon, David L	190	ST. LOUIS METROP.
Simon, Gracita S	050	CLAY-PLATTE
Simon, Nathan M	190	ST. LOUIS METROP.
Simon, Sanford	125	METRO MED
*Simon, William C	120	LAKE OF THE OZARKS
Simons, Paul S	190	ST. LOUIS METROP.
Simowitz, Fredric M	189	ST CHARLES-LINCOLN
Simpson, Albert P	082	GREENE
*Simpson, Floyd D	082	GREENE
Simpson, Joseph	190	ST. LOUIS METROP.
Simril, Wayne A	190	ST. LOUIS METROP.
Sincox, Chas H	074	F-G-W
Singh, Daljeet R	118	LAFAYETTE-RAY
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Singleton, John M	125	METRO MED
Singleton, Marvin A	102	JASPER
Sinnett, Mark F	125	METRO MED
Siripipat, Pallop	014	AUDRAIN
Sisk, James C	190	ST. LOUIS METROP.
Sislen, Donald R	190	ST. LOUIS METROP.
Sisler, Maynard L	070	DUNKLIN
Sisson, Richard G	190	ST. LOUIS METROP.
Sitzman, Everette T	125	METRO MED
Sitzmann, Bryan L	050	CLAY-PLATTE
Siu, Kenneth K C	058	COLE
Skeins, Edward J	082	GREENE
Skelley, Mark J	102	JASPER
Skibba, Joseph L	026	BOONE
Skillman, Robt K	125	METRO MED
Skimming, W. Lee	190	ST. LOUIS METROP.
Skinner, John S	190	ST. LOUIS METROP.
Skinner, John T	125	METRO MED
Sklenar, Donald E	030	BUCHANAN
Skor, Donald A	190	ST. LOUIS METROP.
Slack, Melinda R	082	GREENE
Slahorek, George J	135	MID-MISSOURI
Slankard, J E	125	METRO MED
Slaughter, Carl R	050	CLAY-PLATTE
Slentz, Edwin L	125	METRO MED
Slentz, Wm A	125	METRO MED
Sletten, Ivan W	190	ST. LOUIS METROP.
Slocum, Stephen G	190	ST. LOUIS METROP.
Sly, Anne K	125	METRO MED
Smeltzer, Frederick M	120	LAKE OF THE OZARKS
Smid, Anne A	082	GREENE
Smid, David M	082	GREENE
Smiley, William L	190	ST. LOUIS METROP.
Smit, Herbert M	190	ST. LOUIS METROP.
Smith, Arthur B	125	METRO MED
Smith, Benj F	190	ST. LOUIS METROP.
Smith, Brenda S	125	METRO MED
Smith, Bruce D	030	BUCHANAN
Smith, C. Byron	125	METRO MED
*Smith, Charles H	050	CLAY-PLATTE
Smith, Claude F	206	SOUTH CENTRAL
*Smith, Cyrus D	030	BUCHANAN
Smith, David Lambuth	125	METRO MED
Smith, Dennis W	102	JASPER
Smith, Dermott A	190	ST. LOUIS METROP.
Smith, Elbert E	125	METRO MED
Smith, Emily L	190	ST. LOUIS METROP.
Smith, Garland F	190	ST. LOUIS METROP.
Smith, Gilbert D	034	B-W-R-C
Smith, Herbert P	190	ST. LOUIS METROP.
Smith, Hubert E	125	METRO MED
Smith, Hugh R	190	ST. LOUIS METROP.
Smith, J. Ned	026	BOONE
Smith, James B	190	ST. LOUIS METROP.
Smith, Katherine W	125	METRO MED
Smith, Kathleen	190	ST. LOUIS METROP.
Smith, Kenneth R	190	ST. LOUIS METROP.
Smith, Kenneth R	206	SOUTH CENTRAL
Smith, Kenneth B	074	F-G-W
Smith, Morton E	190	ST. LOUIS METROP.
Smith, O. Dale	125	METRO MED
Smith, Patrick A	026	BOONE
Smith, Peter G	190	ST. LOUIS METROP.
Smith, Porter	070	DUNKLIN
Smith, Ralph O	074	F-G-W
Smith, Reid C	125	METRO MED
Smith, Robert W	190	ST. LOUIS METROP.
Smith, Robt W	078	GRAND RIVER
Smith, Roland T	102	JASPER
Smith, Ted P	135	MID-MISSOURI
Smith, Timothy W	125	METRO MED
Smith, W. Russell	102	JASPER
Smith, Wallace B	125	METRO MED
Smith, Wm J	086	HENRY
Smithson, Debra S	050	CLAY-PLATTE
Smolik, Martin J	102	JASPER
Smoller, Martin B	189	ST CHARLES-LINCOLN
Snavely, Sharon R	125	METRO MED
Snead, William H	082	GREENE
Sneid, David S	125	METRO MED
Snidle, William F	106	JEFFERSON
Snow, Emasue	082	GREENE
Snow, Jon F	082	GREENE
Snowden, Kent L	190	ST. LOUIS METROP.
Snyder, Christopher H	082	GREENE
Sobky, George H	190	ST. LOUIS METROP.
Soeldner, James O	125	METRO MED
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Sohn, Richard	190	ST. LOUIS METROP.
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Solomon, Felix G	ST. LOUIS METROP.	190
Solomon, Harvey	MSMA	002
Soltys, Stephen M	BOONE	026
Sommer, Conrad S	ST. LOUIS METROP.	190
Sommer, Rand W	MSMA	002
Somoza, Jose R	CLAY-PLATTE	050
Soonattrakul, Wuthisak	DUNKLIN	070
Soorya, Narendir T	ST. LOUIS METROP.	190
Soper, Wm D	METRO MED	125
Sopuch, John A	ST. LOUIS METROP.	190
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Sparkman, Thomas C	CAPE GIRARDEAU	042
Speckman, Jerry M	METRO MED	125
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Spencer, Donald M	METRO MED	125
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Sponenberg, Don D	GREENE	082
Sportsman, Weldon L	CLAY-PLATTE	050
Spradlin, Larry D	METRO MED	125
Sprague, Gita	BUCHANAN	030
Spray, Thomas L	ST. LOUIS METROP.	190
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Spurgat, Robert M	BUCHANAN	030
Spurgeon, Milo J	BOONE	026
Spurgeon, Stephen	ST. LOUIS METROP.	190
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Spurny, Otto M	METRO MED	125
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***Stahly, Randall L**	CAPE GIRARDEAU	042
Stahr, William D	CAPE GIRARDEAU	042
Stallard, Donald J	BUCHANAN	030
Stamatis, John J	GREENE	082
Standiford, Steven B	BOONE	026
Stanford, Carol A	METRO MED	125
Stanley, Charles G	METRO MED	125
Stanley, John H	METRO MED	125
Stanton, Danny K	METRO MED	125
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Starkloff, Gene B	ST. LOUIS METROP.	190
Starks, Gregory C	METRO MED	125
Stass-Isern, Merrill L	METRO MED	125
Statland, Harry	METRO MED	125
Statland, Morris	METRO MED	125
Stauffer, Harry B	COLE	058
Stauffer, Larry K	COLE	058
Stavrides, Pete D	ST. LOUIS METROP.	190
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Steele, Mark T	MSMA	002
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Steiling, Sylvia A	ST. LOUIS METROP.	190
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***Steinbrecher, Janis M**	METRO MED	125
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Steinhaus, David M	METRO MED	125
Stelmach, Walter J	METRO MED	125
Stephen, C. Ronald	ST. LOUIS METROP.	190
Stephenson, Hugh E	BOONE	026
Stephenson, Robert E	METRO MED	125
Sterkel, Barbara B	ST. LOUIS METROP.	190
Sterkel, Richard L	ST. LOUIS METROP.	190
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Stewart, C. Tinsley	ST. LOUIS METROP.	190
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Stewart, James L	CLAY-PLATTE	050
Stewart, L. Paul	ST. LOUIS METROP.	190
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Stewart, Wendell	GREENE	082
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Stokes, Douglas L	BUCHANAN	030
Stokes, James M	ST. LOUIS METROP.	190
Stoliar, Bruce	ST. LOUIS METROP.	190
Stone, Mary K	METRO MED	125
Stoneman, William	ST. LOUIS METROP.	190
Stout, Carl N	METRO MED	125
Stoy, Robt P	BOONE	026
Stradford, H. Todd	BOONE	026
Stratemeier, Edward H	METRO MED	125
Straub, David L	JASPER	102
Strauss, Carl F	METRO MED	125
Strecker, William B	ST. LOUIS METROP.	190
Stribling, Thos L	METRO MED	125
Stricker, Eamil A	MID-MISSOURI	135
Stricker, William E	MID-MISSOURI	135
Strickland, James C	ST. LOUIS METROP.	190
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Strobach, Kurt F	ST. LOUIS METROP.	190
Stroble, Mark	ST. LOUIS METROP.	190
Stromberg, Brent V	MSMA	002
Stromberg, Eric D	METRO MED	125
Stronach, Linda L	ST. LOUIS METROP.	190
Stronsky, David	ST. LOUIS METROP.	190
Stroud, Malcolm H	ST. LOUIS METROP.	190
Stryker, William I	ST. LOUIS METROP.	190
Stuart, Byron M	BOONE	026
Stuart, Danl D	C-M-M-R	046
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Su, Philo S	COLE	058
Suarez, Alberto	METRO MED	125
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Suddarth, Sterling B	METRO MED	125
Sudekum, Joseph M	ST. LOUIS METROP.	190
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Sugarbaker, Everett D	COLE	058
Sull, Won-Jong	PETTIS	178
Sullivan, Bradley H	METRO MED	125
Sullivan, Christine	METRO MED	125
Sullivan, Clement J	ST. LOUIS METROP.	190
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Sullivan, John A	GREENE	082
Sullivan, William W	ST. LOUIS METROP.	190
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Summers, John B	ST. LOUIS METROP.	190
Summers, Jos S	COLE	058
Summers, Thomas F	ST. LOUIS METROP.	190
Sundermann, Richard H	ST. LOUIS METROP.	190
Sundstrom, Frank D	GREENE	082
Sunshine, Herbert	ST. LOUIS METROP.	190
Suseela, Dasari	METRO MED	125
Sutherland, Charles J	ST. LOUIS METROP.	190
Sutter, Richard A	ST. LOUIS METROP.	190
Suva, Morfeo M	GREENE	082
Suvan, R	B-W-R-C	034
Suwanabhand, Chalaw	WEST CENTRAL	214
Suwannasri, Rudee	ST. LOUIS METROP.	190
Swaim, Truett	METRO MED	125
Swaney, Charles M	BOONE	026
Swanson, Eric	METRO MED	125
Swarens, Exec. Dir., C. C.	Exectutive Secys.	001
Swaykus, Bernard T	ST. LOUIS METROP.	190
Sweeney, Michael J	METRO MED	125
Sweeney, Thos P	GREENE	082
Sweet, Robert A	GREENE	082
Sweiger, James H	CLINTON	054
Swetnam, Jeffrey A	OZARKS	166
Swinfard, Ronald W	BOONE	026
Sword, Suzanne H	METRO MED	125
Sylvanovich, W. Richard	ST. LOUIS METROP.	190
Syzek, Elizabeth J	BOONE	026
Szabados, Ernest D	METRO MED	125
Szewczyk, Michael J	BOONE	026
Szoko, Edward	ST. LOUIS METROP.	190
Szymanski, Stanley R	GRAND RIVER	078

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Tackett, Russell E	METRO MED	125
Taege, Alan J	BUCHANAN	030
Tailor, Chandrakant C	ST. LOUIS METROP.	190
Takacs, Robert J	METRO MED	125
Talbert, Clifford R	CAPE GIRARDEAU	042
Talbott, Lawrence B	METRO MED	125
Talwar, Tara	ST. LOUIS METROP.	190
Tamblyn, Claire L	METRO MED	125
Tanaka, Geo M	ST. LOUIS METROP.	190
Tang, Teodoro	MID-MISSOURI	135
Tanner, John P	METRO MED	125
Tanner, Robert H	COLE	058
Tanphaichitr, Kongsak	ST. LOUIS METROP.	190
Taormina, Marc K	METRO MED	125
Tarneja, Kailash C	SOUTH CENTRAL	206
Tashma, Sigmund S	ST. LOUIS METROP.	190
Tatkow, Robert W	ST. LOUIS METROP.	190
Taute, Hermann	ST. LOUIS METROP.	190
Taylor, Eugene D	ST. LOUIS METROP.	190
Taylor, John R.W.	METRO MED	125
Taylor, Leon A	COLE	058
Taylor, Philip W	CAPE GIRARDEAU	042
Taylor, Steve J	AUDRAIN	014
Taylor, William K	GREENE	082
Taylor, Wm E	GREENE	082
Tayob, Anver A	ST. LOUIS METROP.	190
*Tedrick, Phillip D	CAPE GIRARDEAU	042
Tedrow, Jeffrey R	D-H-P-D	066
Teeter, Brian H	JASPER	102
Tekwani, Hiralal T	ST. LOUIS METROP.	190
Templer, Jerry W	BOONE	026
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Tenney, Jackie	METRO MED	125
Tenorio, Arturo A	NORTHWEST	158
Tenorio, Genoveva	NORTHWEST	158
Tepper, Arnold	ST. LOUIS METROP.	190
Ternberg, Jessie L	ST. LOUIS METROP.	190
Terry, Boyd E	BOONE	026
Terry, James W	CAPE GIRARDEAU	042
Terry, James F	GREENE	082
Terschluse, David A	ST. LOUIS METROP.	190
Tess, Allen F	ST. LOUIS METROP.	190
Tess, Melvin J	ST. LOUIS METROP.	190
Tessier, John E	ST. LOUIS METROP.	190
*Tewis, Huey D	CAPE GIRARDEAU	042
Thalblum, Harvey	METRO MED	125
Thale, Thomas R	ST. LOUIS METROP.	190
Thawley, Stanley E	ST. LOUIS METROP.	190
Thedinger, Bradley S	METRO MED	125
Theel, Otto W	METRO MED	125
Thibeault, Donald W	METRO MED	125
Thiel, J. Allen	ST. LOUIS METROP.	190
Thiele, Belmont R	ST. LOUIS METROP.	190
Thiele, Otto K	ST CHARLES-LINCOLN	189
Thierauf, Charles G	ST. LOUIS METROP.	190
Thies, Jerome H	WEST CENTRAL	214
Thoma, George E	ST. LOUIS METROP.	190
Thomas, Alexis G	METRO MED	125
Thomas, Christopher Y	METRO MED	125
Thomas, Deborah G	CAPE GIRARDEAU	042
Thomas, Fred A	CLAY-PLATTE	050
Thomas, Horace E	BOONE	026
Thomas, J. Regan	ST. LOUIS METROP.	190
Thomas, James J	METRO MED	125
Thomas, Matthew A	ST. LOUIS METROP.	190
*Thomas, Norvin E	AUDRAIN	014
Thomas, Robert M	BOONE	026
*Thomas-Richards, Jose R	METRO MED	125
Thomasson, David D	GREENE	082
Thomasson, Jeffrey L	ST. LOUIS METROP.	190
Thomasson, Mary W	ST. LOUIS METROP.	190
Thompson, David E	METRO MED	125
Thompson, Eric	BOONE	026
Thompson, F Gregg	BUCHANAN	030
Thompson, Frederick E	CLAY-PLATTE	050
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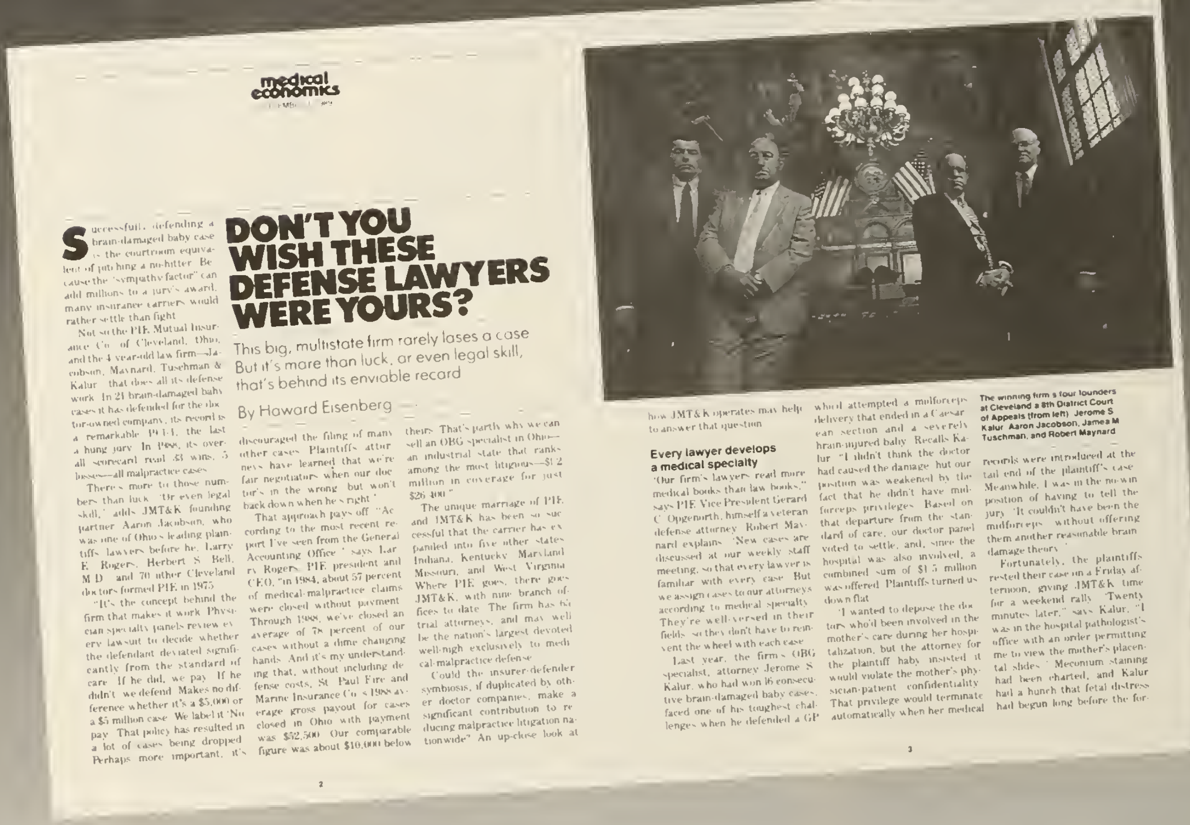

medical economics

DON'T YOU WISH THESE DEFENSE LAWYERS WERE YOURS?

This big, multistate firm rarely loses a case. But it's more than luck, or even legal skill, that's behind its enviable record

By Howard Eisenberg

Successfully defending a brain-damaged baby case is the courtroom equivalent of pitching a no-hitter. Because the "sympathy factor" can add millions to a jury's award, many insurance carriers would rather settle than fight.

Not so the PIE Mutual Insurance Co. of Cleveland, Ohio, and the 4-year-old law firm—Jacobson, Maynard, Tuschman & Kalur—that does all its defense work. In 21 brain-damaged baby cases it has defended for the doctor-owned company, its record is a remarkable 19-1-1, the last a hung jury. In 1988, its overall scorecard read 53 wins, 5 losses—all malpractice cases.

There's more to those numbers than luck. "Or even legal skill," adds JMT&K founding partner Aaron Jacobson, who was one of Ohio's leading plaintiffs' lawyers before he, Larry E. Rogers, Herbert S. Bell, M.D., and 70 other Cleveland doctors formed PIE in 1975.

"It's the concept behind the firm that makes it work. Physician specialty panels review every lawsuit to decide whether the defendant deviated significantly from the standard of care. If he did, we pay. If he didn't, we defend. Makes no difference whether it's a $5,000 or a $5 million case. We label it 'No pay.' That policy has resulted in a lot of cases being dropped. Perhaps more important, it's discouraged the filing of many other cases. Plaintiffs' attorneys have learned that we're fair negotiators when our doctor's in the wrong, but won't back down when he's right."

That approach pays off. "According to the most recent report I've seen from the General Accounting Office," says Larry Rogers, PIE president and CEO, "in 1984, about 57 percent of medical-malpractice claims were closed without payment. Through 1988, we've closed an average of 78 percent of our cases without a dime changing hands. And it's my understanding that, without including defense costs, St. Paul Fire and Marine Insurance Co.'s 1988 average gross payout for cases closed in Ohio with payment was $52,500. Our comparable figure was about $10,000 below theirs. That's partly why we can sell an OBG specialist in Ohio—an industrial state that ranks among the most litigious—$1.2 million in coverage for just $26,400."

The unique marriage of PIE and JMT&K has been so successful that the carrier has expanded into five other states: Indiana, Kentucky, Maryland, Missouri, and West Virginia. Where PIE goes, there goes JMT&K, with nine branch offices to date. The firm has 63 trial attorneys, and may well be the nation's largest devoted well-nigh exclusively to medical-malpractice defense.

Could the insurer-defender symbiosis, if duplicated by other doctor companies, make a significant contribution to reducing malpractice litigation nationwide? An up-close look at how JMT&K operates may help to answer that question.

Every lawyer develops a medical specialty

"Our firm's lawyers read more medical books than law books," says PIE Vice President Gerard C. Opgenorth, himself a veteran defense attorney. Robert Maynard explains: "New cases are discussed at our weekly staff meeting, so that every lawyer is familiar with every case. But we assign cases to our attorneys according to medical specialty. They're well-versed in their fields, so they don't have to reinvent the wheel with each case."

Last year, the firm's OBG specialist, attorney Jerome S. Kalur, who had won 16 consecutive brain-damaged baby cases, faced one of his toughest challenges when he defended a GP who'd attempted a midforceps delivery that ended in a Caesarean section and a severely brain-injured baby. Recalls Kalur: "I didn't think the doctor had caused the damage, but our position was weakened by the fact that he didn't have midforceps privileges. Based on that departure from the standard of care, our doctor panel voted to settle, and, since the hospital was also involved, a combined sum of $1.5 million was offered. Plaintiffs turned us down flat.

"I wanted to depose the doctors who'd been involved in the mother's care during her hospitalization, but the attorney for the plaintiff baby insisted it would violate the mother's physician-patient confidentiality. That privilege would terminate automatically when her medical records were introduced at the tail end of the plaintiff's case. Meanwhile, I was in the no-win position of having to tell the jury 'It couldn't have been the midforceps' without offering them another reasonable brain-damage theory."

Fortunately, the plaintiffs rested their case on a Friday afternoon, giving JMT&K time for a weekend rally. "Twenty minutes later," says Kalur, "I was in the hospital pathologist's office with an order permitting me to view the mother's placental slides." Meconium staining had been charted, and Kalur had a hunch that fetal distress had begun long before the for-

The winning firm's four founders at Cleveland's 8th District Court of Appeals (from left): Jerome S. Kalur, Aaron Jacobson, James M. Tuschman, and Robert Maynard

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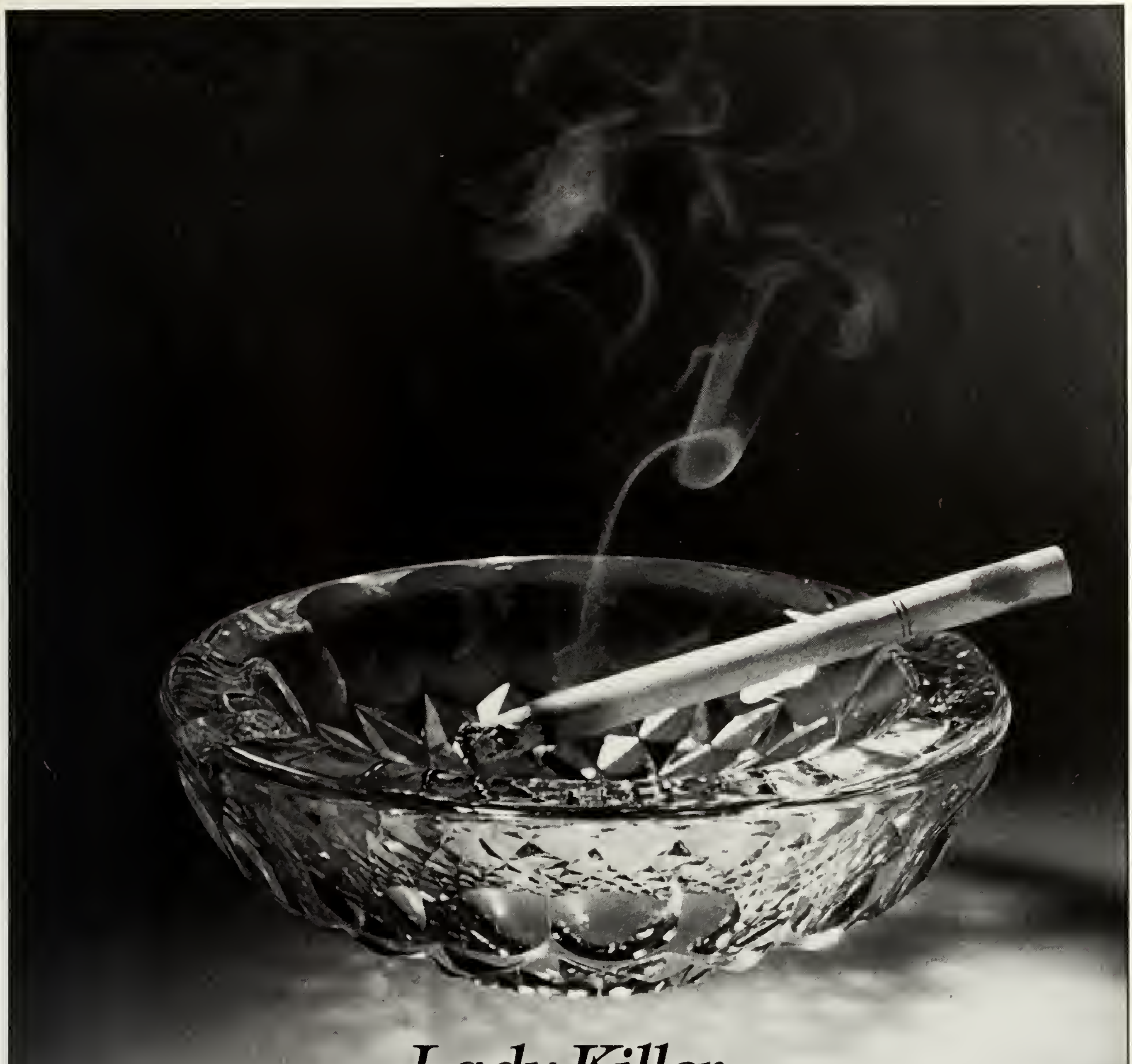

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Missouri Medicine

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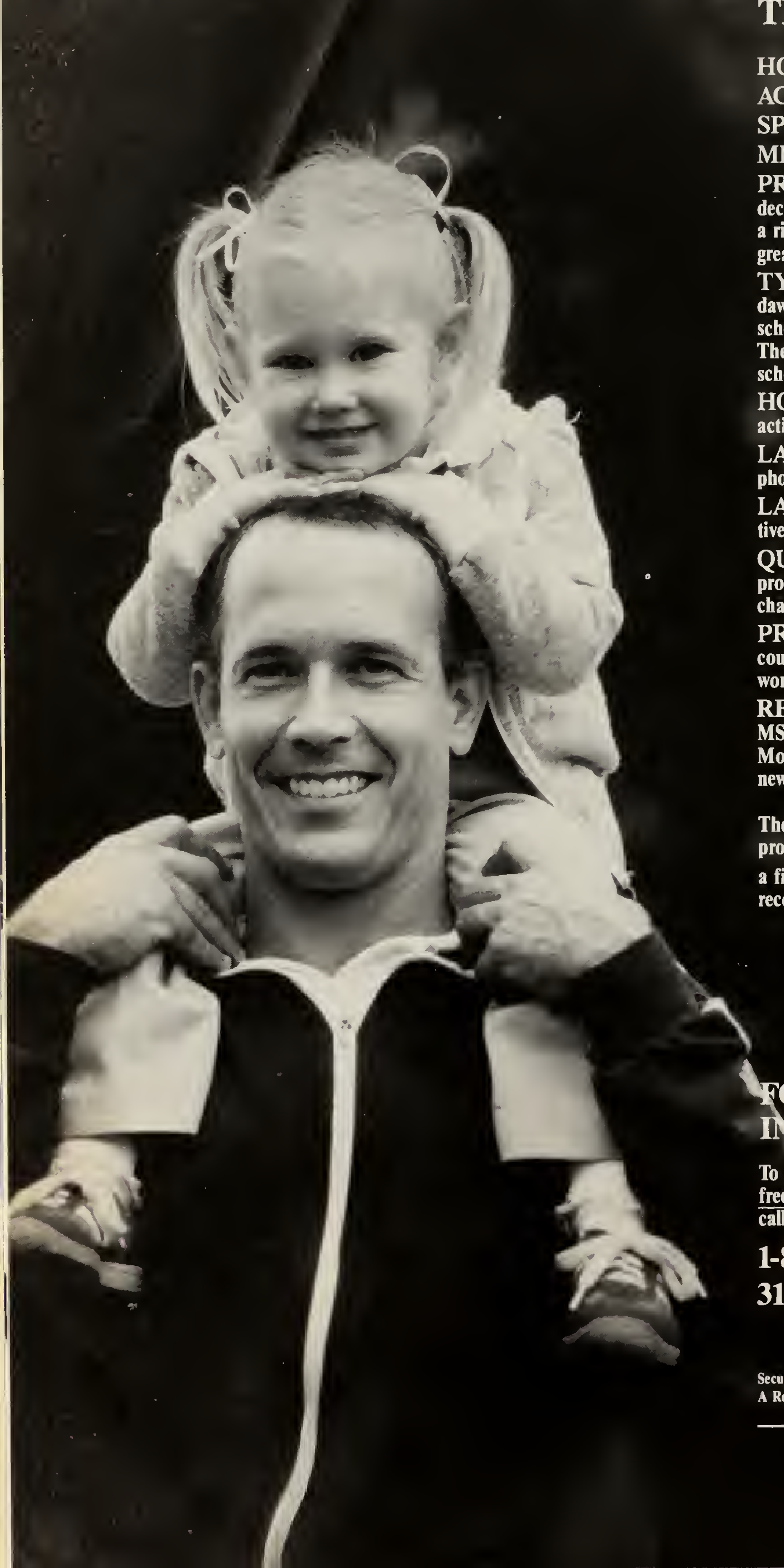

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MEDICAL COLLEGE: University of Missouri, 1978

PRACTICE: "I recently purchased an established but declining sole practitioner office from a retiring physician. It's a risk, but they say that great deeds are usually wrought at great risk."

TYPICAL DAY: "Let the horses out of the corral at dawn and maybe even go for a ride. Then, it's surgery if scheduled and a day of torn ligaments and sprained ankles. The evening finds me on the sidelines of one of our high school sports teams."

HOBBIES: Horseback riding and golf. "If I combined activities, would it be polo?"

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GUEST EDITORIAL

by Wilfred E.
Wooldridge, M.D.
Springfield, Missouri

What has become of the cultivation of taste in the educational process?

A Taste of the Matter

It seems to me that simple good taste has become increasingly rare in the United States. I have read that it is a quality of the civilized land and, if that is true, a large portion of our people are lamentably uncivilized. They have failed to acquire a sense of taste, they do not cherish it and, I suspect, would fight it to the wire. Evidences abound. A few examples:

Early on in this century mass education was promoted as a means to achieving an educated and civilized society, presumably one with taste. Did it? Most assuredly not! A considerable portion of our society never became educated and even violently opposed it. They simply attended school. Becoming educated and merely attending classes are quite different things.

For the 78% of students who complete the 12th grade, those presumably superior members who did not drop out, what of their interest in music? Any interest in classical music has ebbed alarmingly. The market for it has so waned that some recording companies ceased business and the rest reduced their catalogs. I recently asked five college students the identity of Felix Mendelssohn. Only one knew who he was. A small example, yes, but what happened along the way? I am sure all could dwell at length about rock, rap, country and western and bluegrass, the appreciation of which requires no education at all.

If you ask at any bookstore you will find the bulk of sales are: sex, crime, mystery, westerns and the syrupy, saccharine love novels designed for the lonely housewife. Each could have been read equally well after the sixth grade. What became of the cultivation of taste in the educational process?

Our newspapers and television are the worst imaginable arbiters of taste. What is more crude than sticking a microphone to the face of a little boy and leering, "Son, what do you think about your daddy being in the war?" Yet, during the recent Gulf War, that happened on national television day after day.

In Missouri a frightful example of lack of media taste was exhibited by our newspapers in the Nancy Cruzan matter. Every sensational detail was ground to bits and poked down the public gullet each day. Even as the situation ended, our local paper ran a large photo of Nancy Cruzan's coffin carried from the church, preceded by a haggard father, who showed admirable restraint by not taking a club to the reporters who fed on his immense burden of grief.

Or what of the indignity shown our national anthem, especially in time of war? Preceding Super Bowl XXV a young woman with some vocal ability used it, not as a stirring tribute by showing she could effectively sing a difficult piece, but brazenly showing off a coloratura with no majesty at all. And did that result in a storm of protest? By no means! There were so many calls to television

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■ Guest Editorial

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stations that a record company not only contemplated making a recording of the miserable performance, but did so.

A small comfort is that I am not alone. Others know that America's prolonged adolescence is nothing new. It is simply a refusal to grow up. About 1930, H.L. Mencken commented, "Nobody ever went broke by underestimating the taste of the American public."

And there's almost always a classical reference. This time it is: *"De gustibus non disputandum."* The Romans felt there was no accounting for taste. Neither for us is there much reason to attempt accounting for it. Usually we have too little taste to bother. ■

Editor's Note: Dr. Wooldridge is an Emeritus Clinical Professor of Medicine (Dermatology) at the University of Missouri-Columbia.

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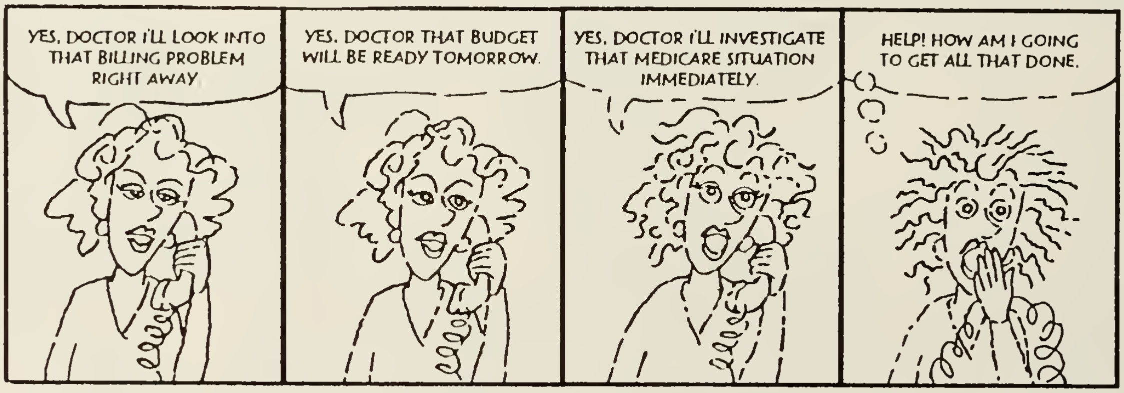
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GUEST EDITORIAL

by Paula J. Petroshak
Kansas City, Missouri

Hazard Communication is the most far-reaching, comprehensive standard OSHA has attempted to date — and with good reason.

Hazard Communication: What Is It?

What is hazard communication? That's a common question asked by many confused employers. And even after receiving guidelines and information on how to implement a Hazard Communication program in their workplace, many have left the information to be lost in the shuffle.

Because of the seriousness of safety and health problems related to chemical exposure, and because many employers and employees knew little or nothing about them, the Occupational Safety and Health Administration (OSHA) issued the Hazard Communication Standard (HCS) 29 CFR 1910.1200. The basic goal of the standard is to ensure employers and employees know about chemical hazards and how to protect themselves. Employees who understand the hazards of chemicals with which they work are likely to handle these chemicals safely. This will reduce the incidence of chemical related illnesses and injuries.

Hazard Communication is the most far-reaching, comprehensive standard OSHA has attempted to date. With the extension of this standard into the non-manufacturing sector (which includes establishments primarily engaged in furnishing medical, surgical, and other health services to persons), an additional 18 million employees are now eligible for information required under this standard.[1]

Chemical manufacturers and importers are required by the HCS to determine the hazards of each product and communicate this information to employers by means of labels and Material Safety Data Sheets (MSDS's).

Employers, as defined in the HCS, means a person engaged in a business where chemicals are either used, distributed, or are produced for use or distribution, including a contractor or subcontractor, are required to:

1. Develop a Written Communication Plan that describes how the criteria required under this standard will be met.
2. Identify and list hazardous chemicals known to be present in the workplace.
3. Ensure that all containers of hazardous chemicals are labeled, tagged or marked with the identity of hazardous chemicals.
4. A Material Safety Data Sheet (MSDS) must be obtained for each hazardous chemical that was identified.
5. Provide instruction and training on the safe use and handling of all chemicals known to be present in their workplace.

Once an employer has implemented a Hazard Communication Program in his or her workplace, it is not a "one-shot" deal. Compliance is ongoing in that newly hired employees must be provided training before their initial work assignment and whenever a new hazard/chemical is introduced into the workplace.

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The Hazard Communication Standard is also referred to as the "Employee-Right-To-Know-Act." Due to employee (even terminated) complaints many employers complaints of alleged violations of standards, unsafe, or unhealthful working conditions are investigated by OSHA.

For the period of October, 1985 through April, 1990, the United States Department of Labor issued 25,787 violations and just under $8.7 million in penalties were collected for Hazard Communication non-compliance. This number included the 384 violations and $142,842 in penalties for health service providers.

With these numbers, one should find the information on how to implement a Hazard Communication program and do so.

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***Editor's Note:** The author is a Health and Safety Consultant for Compliance Coordinators, Inc., in Kansas City, Missouri.*

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GUEST EDITORIAL

by Richard E. Doyle, D.V.M.
St. Louis, Missouri

If we are committed to advancing human health beyond the status quo, we must do more than practice good medicine.

Defending the Use of Laboratory Animals

Most health professionals are aware that animals are used in medical research and teaching and do not question the past contributions or future essential need of animal use. Why, then, do those of us involved in the health professions, particularly those involved in biomedical research and teaching, find our use of laboratory animals persistently and ever increasingly criticized and questioned?

There are many answers to that question, but I would like to focus on two. First, the community of health professionals has long assumed that society accepted and revered its accomplishments wholeheartedly and unquestionably. If that were ever true, it isn't any longer. But, even more fundamentally, we have failed miserably to adequately explain the connection between basic research and modern medical miracles.

Second, the traditional "be humane to animals" movement has evolved into the current "animal rights" movement. This animal rights movement is much more insidious and problematic than its predecessor, and its emergence in the late 1970s and rapid advancement in the last decade has caught the medical community by complete surprise.

If we are committed to advancing human health beyond the status quo, we must do more than practice good medicine. We must educate our constituencies about the means we must use to make advances, while simultaneously understanding and countering the challenges of our adversaries. It is no longer good enough to say "trust us, we are doing good things." The public, in general, does not understand science, and it does not have a blind trust of scientists. Therefore, a proactive education program must be adopted.

On Friday, May 31, 1991, St. Louis University held its second annual Biomedical Research Awards Program. The program honored a University alumnus, Dr. Theodore Cooper, M.D., Ph.D., and several others for their research contributions to human health, specifically, their research contributions involving the use of laboratory animals. It may seem surprising that a university should see fit to single out and honor persons who are working in such a narrow area of the institution's total enterprise. And yet, it is an example of an attempt to publicize the connection between basic research using laboratory animals and tangible medical benefits. Dr. Cooper, a surgeon, was honored for his pioneering research in cardiovascular surgery, his administrative accomplishments in governmental and academic leadership positions, and as chief executive officer of a major pharmaceutical manufacturing company.

But it is not enough to

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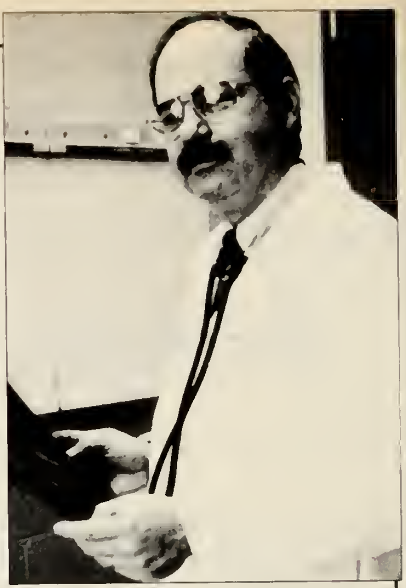
tout our accomplishments and merely justify the means that we use to achieve our goals. As stated earlier, we must understand and counteract our adversaries. Proponents of animal rights espouse a quasi-religious philosophy that states that all animals, not just humans, have rights. This presumably means that we humans cannot "use" animals for any purpose that violates their right to a free and natural life. This includes not killing animals for food consumption, fur, and leather; not using animals for hunting and fishing, zoos and exhibitions; and perhaps even not keeping animals as pets, if the animals are held against their "will." Needless to say, people who promote this radical view of animal rights are militantly opposed to the use of animals for medical research. Ingrid Newkirk, director of People for the Ethical Treatment of Animals (PETA) was quoted in the August 1986 issue of *The Washingtonian* magazine: "There is no rational basis for saying that a human being has special rights. A rat is a pig is a dog is a boy." Fortunately, this view is not shared by the vast majority of people, and most of us believe that humans are special and distinct, and a higher form of life than the rest of the animal kingdom. But animal rights advocates have been successful in infiltrating and taking over many old line "humane societies," which advocated high standards of care for animals whenever they were being used by humans. Good stewardship and humane care is something we can all subscribe to. But ascribing rights to animals, in the sense of the inalienable rights guaranteed to citizens of the United States in the Bill of Rights, is preposterous.

The television show, *Hard Copy*, recently hired Mr. Chris DeRose, president of an organization called Last Chance for Animals, to produce and possibly host segments on "animal issues." Mr. DeRose reveals his stand on medical research in the following statement that appeared in the April 12, 1990 issue of the *Los Angeles Times*: "A life is a life. If the death of one rat cured all diseases, it wouldn't make any difference to me. In the scheme of life we're equal." Do you have any doubt how a person of this mentality will use the power of the media to promote his radical beliefs? How many awards programs will we have to host to counter a single, nationally-aired, anti-animal research program?

It is past time that we of the health community come forward and speak out in defense of biomedical research and in support of medical advances. As we were reminded by Dr. Cooper at our recent Awards Program, with the famous quote of Edmund Burke, "The only thing necessary for the triumph of evil is for good men to do nothing." ■

Editor's Note: Dr. Doyle is Professor and Chairman of the Department of Comparative Medicine at the St. Louis University School of Medicine in St. Louis, Missouri.



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Letters to the Editor

Ham Operators Respond

Dear Dr. Sessions:

Although physicians are by now certainly accustomed to bureaucratic decrees from federal agencies, I would like to share my thoughts regarding a bureaucratic boondoggle created by a federal entity normally unaccustomed to dealing with physicians — the Federal Communications Commission.

One of the responsibilities of the FCC involves the criteria used for licensure of amateur radio ("ham") operators. Although one of the entry level license classes does not have a Morse Code proficiency requirement, all of the other classes of license have Morse Code requirements of 5, 13, or 20 words per minute. A recent FCC ruling (Dec. 27, 1990) provides exemption from the 13 or 20 word per minute code test for persons with "a severe handicap under the 1988 Development Disabilities Act, 29 USC 706(15)(A)(III)." The ruling also says that "only certification by doctors of medicine or osteopathy will be accepted." Applicants also will be required to submit a release allowing the FCC access to appropriate medical records.

This ruling has placed Missouri physicians in the difficult position of being obligated to try to understand just what a "severe handicap" entails in this context. Having been an amateur radio operator for more than 15 years, I will politely suggest that the average practitioner cannot be expected to know what effect particular disabilities have on the ability to learn Morse Code. Only an individual familiar with both medicine and amateur radio can make this determination correctly.

Before this ruling thousands of blind, deaf, and wheelchair-bound individuals have successfully mastered these requirements. Even total quadraplegics can be found on the air *sending* Morse Code using a special "sip and puff" device!

Granted, we all want to be "nice folks" and assist handicapped individuals in any way possible. However, waiving the code test for a handicapped person may not be the "nicest" thing to do in this instance. Handi-Hams, an organization in Minnesota dedicated to encouraging and training handicapped individuals to become licensed ham radio operators, has gone on record *opposing* the code test waiver. They have stated that overcoming the handicap in order to achieve the goal is part of an individual's rehabilitation and lifestyle.

By supporting self-realization to the fullest, handicapped hams gain self-esteem despite severe impairment from disease or catastrophic events such as stroke or spinal cord injury.

Amateur radio is not "like CB" as many believe. Ethics, laws, basic electronic theory, and proper operating procedure are all part of the licensing process. It is a discipline that becomes a worldwide fraternity, allowing individuals to make friends from throughout the world. An individual who upgrades an amateur radio license by means of a doctor's note would be stigmatized as being "unable" to learn, when, in fact, this person might have succeeeded if assisted and encouraged.

Granted, there will be individuals who truly would benefit from a waiver, but this decision should be made by a physician familiar with the hobby. Ham radio is a very popular hobby among physicians, and Missouri is fortunate to have several physician hams throughout the state who would be glad to assist with such a situation. Therefore, I urge the members of the Missouri State Medical Association to do a little "detective" work before signing such a waiver.

Sincerely,
Maria L. Evans, M.D.
Amateur Radio License KT5Y
Member, Medical Amateur Radio Council
Columbia, Missouri

Dear Dr. Sessions:

A provision of the 1988 Development Disabilities Act and put in force by the FCC in February 1991 waives the requirement of Morse Code proficiency tests for disabled persons to obtain an amateur radio license. This can be done by asking a physician to sign a statement stating that the applicant is physically unable to copy Morse Code. Under the circumstances, signing this waiver is a disservice to the handicapped individual and to amateur radio.

I am 55 years old and have suffered from muscular dystrophy all of my life, but 32 years ago, I passed the FCC amateur radio test at the required five and 13 words per minute. Although I do not use Morse Code in operation of my amateur radio station, it is not because I can't; I just do not enjoy that mode of operation. I can still

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associate with my feeling of accomplishment to someone who cannot walk, work, drive a car, or perform any other type of physical activity associated with the "normal" way of life.

Anything less than passing all of the FCC exams requirements is a "cop-out," and denies individuals the opportunity to be fully equal to their non-handicapped peers.

In addition, it would be next to impossible for the average physician to determine if a person has the ability to pass a code test. Physical ability is a very small part of mastering the code. For those who cannot write, provisions are made for those to test their code skills. I might also point out that, for some stroke victims, Morse Code is often the *only* way these individuals can communicate on the amateur bands, since they cannot speak.

I am sure physicians are tempted to sign such a waiver with the intention to "help out" or give the handicapped individual "a break." However, the physician may not realize that, more likely, he or she is doing a disservice to the patient by not giving that person the opportunity to accomplish something by his or her own merit and doing a disservice to amateur radio by helping to promote an unqualified operator on the air. Such an action would be comparable to letting a person with a 1.5 GPA into medical school because he or she "has tried so hard."

The Amateur Radio Relay League, the oldest national organization of amateur radio operators in the United States, has been in existence for more than 75 years. During that time, an extremely high percentage of handicapped individuals have risen to prominent state and national positions within that organization — much higher than in the population at large. I suspect that one of the reasons handicapped individuals gain easy acceptance in the fraternity of ham radio is because **all** hams must adhere to the high standards imposed by the licensing qualifications. As physicians, you are charged with providing a high standard of medical care. Likewise, as amateur radio operators, we are charged with providing a trained pool of radio operators in times of disaster or national emergency. Please consider this when an individual asks you to sign a code test waiver.

Sincerely,
Benton C. Smith
Past Section Manager, Missouri Section
American Radio Relay League

Support for Vaginal Surgery

Dear Dr. Sessions:

This letter is in response to Dr. Kovac's editorial on vaginal surgery in the June issue of *Missouri Medicine.*

As an anesthesiologist who worked with some excellent "vaginal surgeons" before joining the VA, I must agree with the general theme of his editorial. I wonder, however, if anyone has studied the effect of the trend during the 60s and 70s to perform episiotomies on practically all deliveries. Would a good repair lead to a concomitant decrease in later descensus uteri? Might this have affected the perceived accessibility of the uterus by the vaginal route?

If the above suggested change in practice may have skewed the results, I submit that the ladies who are being delivered without anesthesia and without episiotomy in the 80s and 90s should forecast a resurgence of vaginal hysterectomies and anterior and posterior repairs.

Sincerely,
Ralph Braunschweig, M.D.
Chief, Anesthesiology Services
Harry S. Truman Memorial
Veterans' Hospital
Columbia, Missouri

Thanks From a Desert Storm Doctor

Dear Dr. Sessions and Friends of the MSMA:

As an Active Member of the United States Army Reserve, I was not surprised to have been called to Active Duty for Operation Desert Storm. The length of my tour was from December 26, 1990 until May 10, 1991. I was assigned to the 148th Evacuation Hospital, an Arkansas National Guard Unit and served in the northern desert of Saudi Arabia. I thank God that there were very few casualties, and only a small amount of medical support was needed.

I am pleased to be back to enjoy the green grass and trees of Missouri.

Thank you for your generous consideration of this military service with the refund of my dues for 1991. I was proud to represent the physicians of Greene County and the state of Missouri in support of this national military campaign.

Sincerely,
Roy W. Holland, M.D.
Ferrell Duncan Clinic
Springfield, Missouri

EDITOR'S DESK

by Jordan W. Burkey, M.D.
Guest Editor

Pharmacology Woes

Pharmacology was one of those medical school subjects we didn't have to face until late in our Sophomore year. That initial encounter with learning how to treat by medication was none too pleasant. Hot afternoons in a laboratory filled with smelly dogs vomiting following apomorphine injections were apparently supposed to prepare the student for treating colds, backaches, and the like. Of course, life in the real medical world was brightened by pharmaceutical representatives who supplied free samples, pens and emery boards galore to assure you that using their company's products would keep your patients healthy. The deep mystery of drug actions and reactions was smoothed over quickly by these promoters of perfect pills and potions. As we attempt to keep up in the practice of medicine, however, it seems maintaining our knowledge of pharmaceuticals is the most difficult part of "postgraduate education." For example:

1. The United States pharmacy industry spends more than $8 billion annually in basic research alone, creating "new molecular entities" in medicine, along with reshaping old ones. The average $200 million per "new drug" cost to these companies, along with short patent life, generic competition and overprotection by government agencies does tend to hold down research.

2. Understandably, the public has a minimal concept of what medicines can and cannot do. They tend to rely on the public press for most of their information, and as we all know, the best journalist is usually a poor scientist. A fair part of our time with patients involves explaining drug actions and reactions of importance to them, and sometimes brainwashing them of previous concepts.

3. The more patient compliance with medicines is researched, the poorer the picture becomes. Various studies indicate that with patients not filling the prescription in the first place; not taking the medicine long enough; or taking it erratically, probably less than half of prescribed medicine is taken the way the physician desired.

4. That course in medical school covering the actions of basic drugs was a nice foundation for all that has developed since, but that's about it. The PDR now measures some 2500 pages, revised quarterly. (Judging by this tome, *any* known drug may cause headaches, dizziness, or gastric distress.) Infectious disease specialists have to re-lecture hospital staff personnel every few months to allow them to keep up with even the latest cephalosporins. The old standard Goodman and Gilman pharmacy text probably belongs in a medical museum. The expression "swallowing a bitter pill" most likely will soon be history too. Medications of importance in the future will probably be im-

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Editor's Desk

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planted, with dosages released by computer control.

5. Prescribing a medicine by its trade name these days implies that some drug representative has the doctor under his thumb – slipping him expensive freebies to keep him happy. Generic is the real way to go – if one can remember how to spell such medications as *docosahexaenoic* acid tabs.

The "good old days," now much maligned, did have a positive aspect. With quinine, calomel, whole leaf digitalis, and an occasional worm medicine, one could get by just fine. The tribulations of keeping up with pharmacy anymore are enough to call for a good nerve relaxant. Generic of course.

Editor's Note: Dr. Burkey is a former editor of Missouri Medicine and has served as Editor Emeritus for the past three years.

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PRESIDENT'S PAGE

by Dorothy D. Reister, M.D.
MSMA President

Through various activities and projects, the Missouri State Medical Association is working diligently to see that the goals of the members are reached and the needs of Missouri's patients met.

We Really Are Here to Help You!

This phrase ordinarily strikes fear in our hearts. However, I would like to have you re-read the title and see that there is truth in the statement from Missouri State Medical Association. Our efforts ultimately benefit our patients, for whom we are health advocates, but benefit our members (the ones holding the kite string) and all physicians in Missouri whether they support us or not with their membership. Through the summer months several projects are ongoing. Here is an update on a few of them.

Health Care of Under- and Un-Insured:

This problem is widespread in Missouri, in rural and urban areas. We see patients every day who delay seeking medical care because they cannot afford it. We see those patients being sicker longer as a result. Preventive medicine to many people is an unnecessary expense. As an example, the hypertensive patient isn't recognized until there has been a major cerebral catastrophe; if it had been diagnosed earlier and proper treatment instituted, such a catastrophe could have been avoided. Well-child care is delayed and the child with measles could have been spared the disease and its complications. All of us have similar examples. Of course, this is a mountainous problem but our patients deserve leadership by physicians in helping to find solutions. Tabulation of the number of hours and dollars of charitable care by our members is evidence of a tremendous contribution and we are justifiably proud of those members. Medicaid amounts to almost charity care in Missouri, yet if we each take care of some Medicaid patients we share the burden and keep our population in better health. These patients tend to overuse the Emergency Room when they should be seen in doctors' offices for non-emergency situations. This is a matter of educating patients about priorities and expenses. Medicare patients have higher and higher deductibles and greater restrictions put on their care by HCFA resulting in less-than-optimum care. Again they are sicker longer. Transportation to the site of health care is another problem, both rural and urban, which decreases access to health care. Public transportation in many areas is non-existent or inadequate and patients must rely on friends or family. **Health Access America** was developed by the American Medical Association in conjunction with a broad base of sources and introduced to the public in February, 1990. It has been promoted to Congress and other bodies as a framework on which to build. Missouri State Medical Association endorsed Health Access America. In line with this goal, some plans will be presented to our Council to help our Missouri patients.

Missouri State Board of Healing Arts:

We have a dedicated group of physicians who serve on this

continued on page 628

continued from page 627

board, plus a public member, by governor appointment. Throughout the state there have been many concerned, even irate, physicians who feel they have been wronged or mistreated by the board and its investigators. For such situations we have now established a Liaison Committee of the Missouri State Medical Association to hear from such physicians and to see if there is something we can do to help. Perhaps you would compare it to an ombudsman group of one's peers. This committee will be meeting throughout the summer, sometimes with representatives of the board. With so many physicians unhappy with the board, we owe it to our members to examine the matter. Any concerns, complaints and inquiries may be sent to the office of the Missouri State Medical Association, confidential to the Liaison Committee. We will keep you informed about this situation within the bounds of confidentiality.

Risk Management/Tort Reform/ Blue Ribbon Committee:

We have all heard from too many sources to "clean your own house." We are developing a program to help our members evaluate their potential risks in a risk-management program. Colorado has had such success that the trial attorneys in Colorado may move to neighboring states. Other states having such programs have shown substantial reductions in liability cases with the result of reduction in liability premiums and nuisance suits. It's a bit like the psychiatrist changing the light bulb – the bulb really must want to be changed. We physicians must take a close look at our habits and practices and live up to the adage "Physician Heal Thyself" and we can do it. More details to come later.

Missouri Medical-Legal Symposium:

Joining forces, the legal and medical communities will have a seminar on Saturday, September 7, 1991 covering topics of joint concern. Although the Missouri Bar Association does not speak for the Missouri Association of Trial Attorneys as a body, we hope that the meeting of lawyers and physicians from throughout the state can improve our cooperation and communication. Topics will include Medical Discipline, Contagious Disease Testing Mandates, Bioethics, Medicare/ Medicaid and Medical Records. We will meet from 10:00 a.m. to 4:00 p.m., with a luncheon featuring an outstanding speaker, plus food. It is a first for the state of Missouri and I hope we will have a great deal of interest and attendance. See you September 7!

These are only some of the summer activities. Staff and officers have been busy within and beyond the state. You should know already about our legislative successes including the Utilization Review bill and Durable Power of Attorney for Health Decisions, among others. Starting in June we will have had, I hope, massive letter-writing campaigns to Congress for repeal of the "gag rule" and for changes in the proposed HCFA regulations pertaining to the RBRVS which have further decreased access for Medicare patients if enacted. These are just two of the items that show strongly why we must stay in close touch with our Congressmen and Legislators and keep those cards and letters going to them. We also need the personal contacts made when they are home. I have met with both Senator Danforth and Senator Bond during the second half of July. As for me in the role of your president, I will be "on the road again" (or still) and I'm looking forward to seeing many of you personally in the coming months.

So you see...we **really** are here helping you!! ■

September Puzzles

1. What is the oldest outdoor sport?
2. List eight countries named for people.

(1) United States of America – named for Amerigo Vespucci

(2) Saudi Arabia – named for King Saud

Now you name 6 more!

Answers next month.

AUXILIARY MESSAGE

by Nona N. Chapman
MSMAA Membership Chairman

Goals for this year's MSMA Auxiliary include increasing new members, retaining current members, and regaining members of past years.

Membership: A Perspective

Many words have been written in this column regarding membership in the Missouri State Medical Association Auxiliary listing benefits as well as the need for your spouse's dues. Our MSMA Auxiliary membership brochure states: "We offer you...Peer support, leadership training, communications, resource material, talent and skill development, legislative involvement, opportunities to help others and a chance to make a difference." This is really quite an offering!

Despite all our efforts to maintain quality in our organization, our membershp has experienced a decline over the years. Many excuses have been given in an effort to explain this occurrence: both husband and wife are working professionals, apathy, meeting times are not convenient, young children at home, etc. Of all of these possible reasons the most frightening is apathy. Many programs on motivating volunteers have been sponsored over the years by the MSMA Auxiliary. It was one of these state sponsored programs that prompted me to step forward and offer my meager talent to the organization. This past year, we've heard the phrase, "preaching to the choir" repeated over and over. While I agree, I am also in favor of offering the best programs available in the hope that a few visitors come to call. Granted, my children were out of school and I worked only part-time in my spouse's office when I went looking for a worthwhile project. We must continue our course of striving to attract talent from our ranks.

Although talent is important, it has another face. It's called "money." We cannot function in this organization without members and without dues we do not operate. Our goals this year are to: (1) retain our current members; (2) regain those who for some reason did not renew last year; and (3) add many new faces to the Federation (county, state and national medical auxiliary).

Obviously there are peaks and valleys in our auxiliary volunteer lives. It is important that we continue to support medical auxiliary with dues when other demands are placed on our time.

Finally, with letters like "DRG" and "RBRVS" adding more stress to the practice of medicine, why not encourage your spouse to join the support group that provides empathy and camaraderie for the medical family? We care about you. We are here for you.

For more information, write or call:

Missouri State Medical
Association Auxiliary
C/O Nona N. Chapman,
Membership Chairman
1703 West Cape Rock Drive
Cape Girardeau, MO 63701-2610
Telephone: 314/335-2427

■

Correction: In the June *Missouri Medicine,* the cost of State Auxiliary dues was listed incorrectly as $8.00. **The correct cost for State Auxiliary dues is $13.00.**

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Practice Management

by Janice K. Woerth, Ph.D.

Do you have a question for Dr. Woerth? Include your questions along with your name, address and phone number and send them to:

Janice K. Woerth, Ph.D.
Practice Management
c/o *Missouri Medicine*
P.O. Box 1028
Jefferson City, MO 65102
Or call her direct:
202/363-1780

Although your name will not be used in the journal, please include your name and phone number so that Dr. Woerth may contact you if she needs additional information to answer your question.

Dear Dr. Woerth:

Could you explain what is meant when insurance companies "down-code" my claims?

Dr. M.E.W.

Dear Dr. M.E.W.:

Down-coding is best explained with an example. If you sent a claim to an insurance company for a comprehensive office visit and, based on the diagnosis, the insurance company felt that the more appropriate office visit for the diagnosis was a limited office visit, then you would be down-coded to a limited office visit from a comprehensive office visit and reimbursed accordingly. You may ask how an insurance company has the right to reduce your services/procedures. Insurance policies cover "medically necessary" services/procedures. If the services/procedures that are billed are more than is medically necessary, again, based on the diagnosis, the insurance company has the authority to down-code to a more appropriate service/procedure.

You can determine if your services/procedures are being down-coded by reviewing the explanation of benefits sent by the insurance company. In medical offices with which I consult, I frequently find that several thousand dollars are being lost annually to down-coding. This goes undetected by office staff because they do not, or do not know how to, review the explanation of benefits sent by the insurance company.

To avoid the down-coding of your claims, be sure that a specific diagnosis is noted on the claim as the justification for each service/procedure rendered. Avoid using diagnosis codes that include "unspecified" as part of their definition, for example code 537.9, "unspecified disorder of stomach and duodenum." Also include in the diagnosis any co-morbidity and/or past medical history or family medical history that effects the services rendered. Past medical history and family medical history codes are found in the V code section of the ICD-9-CM (diagnostic codes), Volume I.

Dear Dr. Woerth:

Is it legal for a physician participating with Medicare to bill the patient for the 20% not paid by Medicare?

R.Q.

Dear R.Q.:

It is not only legal for a participating physician to bill the Medicare patient for the 20% not paid by Medicare, it is the law that this 20% must be billed. The 20% is the patient's copayment and the medical office is legally obligated to collect the copayment from the patient. You may write-off the 20% Medicare copayment when the amount owed is less than it would cost to send a statement, if you have proof that the patient is indigent, or if the patient also is covered by Medicaid.

Reminder to Readers:

The 1991 ICD-9-CM addendum has been released and each medical office needs to have this information in order to code accurately. The new or revised codes listed in the 1991 addendum will be required for use on Medicare claims by October 1, 1991. Addendums are mailed free of charge to those who have purchased the ICD-9-CM from the U.S. Department of Health and Human Services or they may be purchased from St. Anthony Publishing at (800) 632-0123.

■

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For Your Information:

Pressure Ulcers

Pressure ulcers (also called bedsores) affect 3% to 11% of hospital and nursing home patients. Although most seen in the elderly, these ulcers can also occur in younger people who are unable to move about following musculoskeletal or neurological damage. Despite the belief that pressure ulcers are caused by neglect and inattention by hospital or nursing home personnel, even the most diligent nursing care may still not be able to prevent pressure ulcers. Increased understanding of the formation, treatment, and prevention of pressure ulcers by family members, home caregivers, and handicapped individuals can be a great help to those who suffer from these ulcers.

Causes and predisposing factors

Any pressure, friction, or shearing force upon the skin can cause a pressure ulcer. Even the simple act of sitting in a chair can cause enough pressure to form an ulcer. A recent study showed that a slight pressure of only 32 mm of mercury is sufficient to clamp the small blood vessels in the skin, shutting off nutrients and oxygen. If this pressure continues for as little as two hours, the surrounding tissue may die and cause a pressure ulcer. (For comparison, lying down on a soft mattress creates a pressure of 100-150 millimeters of mercury at the sites of contact.)

Why doesn't everyone get pressure ulcers? The normal patient's body instinctively makes slight shifts in position to compensate. In addition, certain factors predispose individuals to acquiring pressure ulcers. These include: old age, decreased mobility, neurological damage (such as spinal cord injuries), obesity, malnutrition, chronic disease states (such as heart disease, kidney failure, anemia, or cancer), diabetes, or incontinence of bladder or bowel.

Ninety-five percent of all pressure ulcers occur below the waist. Common sites include the back of the head, buttocks, feet, and the bony prominences of shoulders, elbows, hips, knees, and ankles. The sacrum, or "tailbone," is also a common location.

Appearance

At first, pressure ulcers merely appear reddened, due to the body's response to provide oxygen and nutrients via increased circulation to the area. Eventually, enough pressure will damage the blood vessels in that area, causing fluid and red blood cells to leak from the vessels. This leakage gives the area a dusky blue appearance. Later blisters may break and drain clear fluid, exposing a shallow ulcer. As the surrounding tissue dies from lack of nutrients and oxygen it forms a brown-black, fibrous cover called *eschar*. This eschar then sloughs off revealing a larger, deeper ulcer that may even expose bone.

Treatment

Historically, pressure ulcers were treated with a variety of remedies (most of them unproven "folk remedies") such as egg whites, molasses, sawdust, bismuth and bourbon, and even maggots! However, modern therapy for pressure ulcers depends largely on the stage of ulceration. With early ulcers, the most effective therapy is to remove pressure from the area and apply a lubricating lotion to the site. More advanced ulcers can be treated by draining superficial blisters with a sterile needle and applying Gentian Violet or a transparent dressing, such as Tegaderm. Deep ulcers require removal of the surrounding dead tissue by a physician.

Exposed ulcer bases can be cleaned with Hibiclens scrub or sterile saline solution and coated with an antibiotic ointment containing bacitracin and polymixin. These areas should then be covered with a hydrocolloid dressing (such as DuoDerm), or a transparent dressing, and checked every one to two days. Your physician may suggest one of a variety of pastes available for very deep ulcers. The treated area can then be protected with a thick gauze pad placed over the ulcer and covered with paper tape. Care of large ulcers requires a physician's supervision.

Prevention

Although pressure ulcers are hard to prevent, some of the following suggestions may be helpful. Handicapped individuals can aid in their own care by following as many of these suggestions as possible.

- A water mattress, inflatable cushion, or foam mattress on top of the regular mattress can help reduce pressure on the bony prominences.
- Change position every two hours — from the back, then to the left side, then to the right side. Do not lie directly on the side, but positioned at a 30° angle with pillows or cushions.
- When moving, lift, rather than drag, the limbs or body. A sheep skin can be helpful in reducing friction while turning or changing position.
- Use pillows or cushions to keep pressure off bony prominences.
- Wheelchair-bound individuals should sit on a gel cushion or other flotation device. "Doughnut" cushions are not recommended, as they may actually increase pressure in some spots.
- Cushion heels and ankles to keep them from contacting the bed. Quilted boots ("bunny boots") are helpful.
- Keep the bed free of debris and food. Crumbs can cause friction against body parts.
- Eat a diet rich in protein and take a daily vitamin with minerals. Malnutrition is one of the most common predisposing factors in the development of pressure ulcers.
- Exercise, physical therapy, and careful weight control also have a preventative effect. Diabetics should practice good diabetic control, since diabetes slows the healing process.
- Avoid heating pads, electric blankets, and heat lamps. They increase the body's tissue demands for oxygen and nutrients.
- Good skin care is crucial. Always clean skin thoroughly. Use a lubricant cream when skin becomes dry and cracked. Wash and dry the skin thoroughly after each episode of incontinence.

For a debilitated individual to avoid pressure ulcers, it requires a great deal of work, care, and prevention. This is especially true for handicapped individuals who practice self-care. Only by using the team approach to care — cooperating with physicians and other health care professionals — and practicing good preventative skills can we better combat this common medical problem.

■

This health information feature is provided to you as a public service from your physician and the member physicians of the Missouri State Medical Association.

The Failure of Ciprofloxacin to Prevent the Progression of Streptococcus Pneumoniae Infections to Meningitis

Robert C. Kimbrough, III, M.D., F.A.C.P., Wolfe B. Gerecht, M.D.,
Frederick C. Husted, M.D., and John E. Wolfe, M.D.
Springfield, Missouri

The authors present two cases to illustrate their belief that ciprofloxacin may be appropriately used to extend the spectrum of oral antiobiotic therapy, but may not be appropriate therapy for common outpatient infections that are suspected to be caused by *S. pneumoniae.*

Ciprofloxacin is a fluoroquinolone that is attractive because of its potency, systemic bioavailability, bactericidal action, and pharmakinetics. Minimal inhibitory concentrations of ciprofloxacin are generally below 0.5 microgram/ml for aerobic gram-negative organisms. The minimum inhibatory concentration for *Streptococcus pneumoniae* are generally reported between 1 and 2 microgram/ml.[1]

Despite these high minimum inhibitory concentrations against *S. pneumoniae,* the quinilones have been reported to be effective in patients with respiratory tract infections caused by this microorganism.[2] Recently, the use of ciprofloxacin for lower respiratory tract infections and other *S. pneumoniae* infections has been questioned.[3] We report two cases in which ciprofloxacin failed to eradicate *S. pneumoniae.* One was an ear infection that progressed to meningitis and bacteremia and finally death. The other illustrates the failure of ciprofloxacin to prevent the progression of *S. pneumoniae* meningitis.

Case 1

A 65-year-old white man had been treated at our clinic for chronic renal failure and hemodialysis since August, 1988. The chronic renal failure began in May of 1988, following a prolonged illness and multi-organ system failure. He was receiving hemodialysis three times weekly and had been tolerating this therapy well.

The day prior to the onset of his acute illness, the patient had undergone hemodialysis without difficulty. He was seen June 8, 1990, complaining of left ear pain. He was afebrile. He began taking ciprofloxacin, 250 mg every 12 hours. The next day he came to the dialysis unit complaining of fatigue, weakness, and nausea. His body temperature was 97°F, blood pressure 140/70, heart rate was 96. His left ear had thick, rusty colored drainage, some of which was obtained for culture. On June 12, the patient underwent uneventful hemodialysis with no complaints and normal vital signs.

On June 16, the patient had a temperature of 101°F, confusion, and did not respond to verbal commands. The blood pressure was 170/90, heart rate was 107, rising to 116 during dialysis. Physical examination showed unresponsiveness, a stiff neck, left ear purulence, and signs of congestive heart failure. The patient was admitted to the intensive care unit and a lumbar puncture was performed. Appropriate cultures were obtained and penicillin administered.

Chest x-ray showed moderate cardiomegaly and diffuse interstitial pulmonary edema. A computed tomographic scan of the head revealed mild ventricular dilation and no intracranial mass effect. Lumbar puncture revealed 3,000 white cells, 96% of which were polymorphonuclear cells, a glucose of 1 mg% and a protein of 438 mg%.

The culture from the left ear taken June 6 grew *S. pneumoniae* sensitive to all antibiotics tested, including ciprofloxacin. Repeat culture of the ear on the date of admission grew *S. pneumoniae* plus *Staphylococcus epidermides.* Sputum culture grew a large amount of *S. pneumoniae* and a moderate amount of *Candida albicans.* Blood cultures on the date of admission grew *S. pneumoniae* with similar sensitivities as the original ear culture. Spinal fluid on the date of admission showed scant growth of *S. pneumoniae.* All *S. pneumoniae* organisms were tested for sensitivities to ciprofloxacin by Kirby-Bauer disk diffusion sensitivity using a 5 microgram disk. All had similar sensitivities and all were sensitive to ciprofloxacin. Tube dilation sensitivities performed on the blood and cerebrospinal fluid isolates revealed a minimal inhibitory concentration of 0.5 microgram/ml to ciprofloxacin.

Despite aggressive intravenous antimicrobial therapy with penicillin, the patient died June 19.

Case 2

The patient is a 43-year-old white woman who was admitted with signs and symptoms of acute bacterial meningitis on October 4, 1990. The patient's medical history included therapy for Hodgkin's disease three years prior to admission. During evaluation for that illness the patient underwent a splenectomy. She received radiation therapy but no chemotherapy. She had received pneumococcal vaccine.

Three weeks prior to admission the patient had undergone 10 days of treatment with amoxicillin for an upper respiratory infection. Her 7-year-old daughter had received similar therapy for similar complaints. The patient had been on the amoxicillin for approximately one week when her current illness began.

Three days prior to admission, the patient had had onset of nausea, watery diarrhea, and muscle aches. She was afebrile. One day prior to admission the patient became febrile and had continuing muscle aches. She was seen by her family physician and began taking ciprofloxacin, 50 mg every 12 hours. The patient took the first dose 24 hours prior to admission and the second dose approximately 12 hours before admission. The evening prior to admission the patient's temperature rose to 103°F and she became confused.

On the day of admission the patient was lethargic, confused, and complaining of headache and lower extremity pain. Examination revealed a temperature of 103°F, normal blood pressure and tachycardia. She had a stiff neck and petechiae on her soles. A lumbar puncture revealed purulent spinal fluid, and the patient was promptly begun on intravenous ceftriaxone and penicillin therapy.

Spinal fluid test results revealed 19,000 white cells, 91% of which were polymorphonuclear white cells, a glucose of 2 mg% and a protein of 500 mg%. Gram stain revealed gram-positive diplococci. Spinal fluid culture eventually grew *S. pneumoniae* that was sensitive to all antibiotics tested, including ciprofloxacin. The ciprofloxacin testing was done by Kirby-Bauer disk diffusion technique with a 5 microgram disk and revealed a zone size of 25 mm. Tube dilution sensitivities revealed a minimum inhibitory concentration of 1.0 microgram/ml to ciprofloxacin.

Ceftriaxone was discontinued when the culture results were known. The patient continued to receive intravenous penicillin and recovered uneventfully.

Discussion

Despite growing concerns regarding the use of fluoroquinolones for lower respiratory infections, these drugs are still marketed and used for this purpose.[4] The reports of relatively poor activity of the fluoroquinolones against *S. pneumoniae* are offset by reports of clinical response of patients treated with these drugs. The organisms in these cases were clearly sensitive to ciprofloxacin by Kirby-Bauer disk diffusion and standard tube dilution tests. However, with oral therapy mean peak serum levels are usually no greater than 3 microgram/ml.[5] This appears to discourage the use of ciprofloxacin if *S. pneumoniae* meningitis is possible.

Both patients were immunocomprised; one with end-stage renal disease, and the other with treated Hodgkin's disease and asplenia. In both, especially the asplenic patient, early and aggressive therapy with penicillin would have been the best course of action. Their immunocomprosed status would make these patients less responsive to any form of antimicrobial therapy. Any asplenic patient should be instructed to respond immediately to a febrile illness taking empiric penicillin and/or seeking immediate medical attention.

We believe that ciprofloxacin may be appropriately used to extend the spectrum of oral antibiotic. However, we believe that ciprofloxacin is not appropriate therapy for common outpatient infections, including community-acquired pneumonia, pharyngitis, or otitis media that is suspected to be caused by *S. pneumoniae*.[6]

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Current Therapy of Impending Myocardial Infarction and Acute Cholecystitis

Michael J. Nelson, M.D., Roman S. Enriquez, M.D.,
Gaston G. Guerra, M.D., John T. Miller, M.D., and **Douglas B. Bogart, M.D.**
Kansas City, Missouri

The authors discuss the treatment of severe coronary artery disease and acute cholecystitis using laparoscopic laser in one instance and percutaneous transluminal coronary angioplasty (PTCA) in the other. Their report demonstrates that both can be applied with relative safety in close temporal proximity.

Severe coronary artery disease and acute cholecystitis can be life-threatening events. When both occur at the same time in the same patient, they represent a particular challenge to the clinician.

We report a patient who had severe unstable angina treated with percutaneous transluminal coronary angioplasty (PTCA) followed by acute cholecystitis treated with laparoscopic laser cholecystectomy. Both treatment options are readily available, and this report demonstrates that they can be applied with relative safety in close temporal proximity.

Case Report

A 65-year-old woman was admitted with a two-day history of intermittent severe chest pressure, nausea, weakness, and light-headedness. The patient had coronary artery disease and continued to smoke cigarettes. On examination her blood pressure was 132/76, and her pulse was 70. There was an S4 on cardiac examination. The patient had bilateral carotid and femoral bruits, as well as an abdominal bruit. The popliteal and pedal pulses were present.

The chest radiograph showed no evidence of cardiomegaly or congestive heart failure. The electrocardiogram showed poor R-wave progression across the precordium with T-wave inversion in V1-V3.

The patient was treated with calcium channel blockers, aspirin, and intravenous nitroglycerin. The patient continued to have chest pain and underwent emergent cardiac catheterization. This study showed a subtotal left anterior descending vessel occlusion with moderate disease in the circumflex and right coronary arteries. There was a large anteroapical wall motion abnormality with an ejection fraction of 25%.

The patient underwent immediate percutaneous transluminal coronary angioplasty of the left anterior descending artery, using a 2.0 mm and then a 2.5 mm balloon. The patient had an excellent angiographic result and the chest pain resolved. There was no change in the electrocardiogram, and serial creatinine kinase determinations remained normal.

Initially, the patient did well. However, the day after angioplasty, she developed abdominal pain and a low grade fever. On the second post-procedure day, the patient's temperature had reached 38.8°C and she had a white blood cell count of 19.7 X 10^6/L with a left shift. Urine culture revealed *Escherichia coli* sensitive to cefoxitin, which was started. She continued to have impressive abdominal pain and localized rebound tenderness. An abdominal ultrasound revealed cholelithiasis with a thickened gallbladder wall, consistent with cholecystitis. On the third day after PTCA, the patient underwent laparoscopic laser cholecystectomy. Intraoperative laparoscopic cholangiograms revealed no intraductal stones nor ductal dilatation. The pathology report of the specimen indicated cholelithiasis with acute and chronic cholecystitis.

Postoperatively the patient's status remained stable. She did not develop congestive heart failure, angina, or arrhythmias. She was discharged in good condition, and has remained well in the six months since discharge.

Comments

The occurrence of gastrointestinal complications, including cholecystitis, is well described following cardiac surgery.[1,2] We report here a patient who developed acute cholecystitis following an angioplasty for an impending myocardial infarction. Although the patient had no prior documentation of cholelithiasis, it is very likely that the stones were present prior to this hospitalization. The decreased oral intake and possibly some hypoperfusion associated with her cardiovascular disease and recent PTCA may have predisposed this patient to acute cholecystitis.[3]

This case illustrates that laser laparoscopic cholecystectomy, a relatively new and less invasive procedure than standard cholecystectomy, can be applied to patients with cardiac compromise. This patient had severe left ventricular dysfunction and three-vessel coronary artery disease, which placed her at high risk for standard cholecystectomy. Although laser cholecystectomy does require a general anesthetic, it is, in skilled hands, a shorter procedure and does not require a large abdominal incision. This reduces the incidence of immediate complications, such as atelectasis and wound dehiscence. This case also underscores the concept of dealing with the "culprit lesion" in unstable angina pectoris.[4] Even though the patient had disease in the circumflex and right coronary arteries, the lesion in the left anterior descending was the lesion producing the acute symptoms. The angioplasty of this lesion resulted in a resolution of the symptoms and allowed for a safe cholecystectomy.

We believe that for patients who require cholecystectomy, and who also have significant cardiac compromise, the laser laparoscopic approach is preferred.

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Pediatric Knee Pyarthrosis Presenting as a Calf Abscess

J.T. Jeffries, M.D. and **R.W. Gaines, Jr., M.D.**
Columbia, Missouri

The authors present a case that, to their knowledge, is the first report of an occurrence of knee pyarthrosis presenting as a calf abscess in a pediatric patient.

Communication between the knee joint cavity and the posterior calf generally occurs through the semimembranous bursa. Because of this communication, pyarthrosis of the knee can result in posterior calf abscess in adults. We present a case in which this occurred in a child.

Case Report

A 10-month-old white girl had a one-week history of fever associated with erythema, edema and tenderness of the right lower leg. The patient had been treated with oral amoxicillin prior to admission. Physical examination revealed an iritable infant in mild distress with an oral temperature of 38.5°C. Examination of her right lower extremity revealed gross edema and erythema distal from the inguinal ligament. The patient resisted any attempt at passive range of motion movement of the knee or the ankle. Detection of a knee effusion was difficult due to general edema of the extremity, but the calf was tensely swollen. Radiographs revealed no evidence of osteomyelitis. Admission white blood cell count was 24,600/mm3 with 17% bands. Erythrocyte sedimentation rate could not be obtained because of a low hematocrit. The patient was taken to the operating room and a lumbar puncture was performed; the cerebrospinal fluid was clear and without cells.

A straight medial incision was made over the calf, the subcutaneous tissue was divided, and approximately 20 mL of purulent material was drained from an abscess between the medial gastrocnemius and soleus muscle bellies. Arthrocentesis of the knees from a lateral approach produced 10 mL of purulent material. The knee was then drained through a lateral incision. The posterior calf abscess and the knee joint communicates via the medial gastrocnemius bursa (Fig 1). Culture revealed *Hemophilus influenza.* The patient was treated with dressing changes and intravenous vancomycin and ampicillin. The medications were changed on postoperative day two to cefotaxime, which was continued for 21 days.

Four months postoperatively, the patient's passive range of motion at the hip, knee and ankle were normal. Her wounds were well healed. There was no radiographic evidence of osteomyelitis or physeal injury.

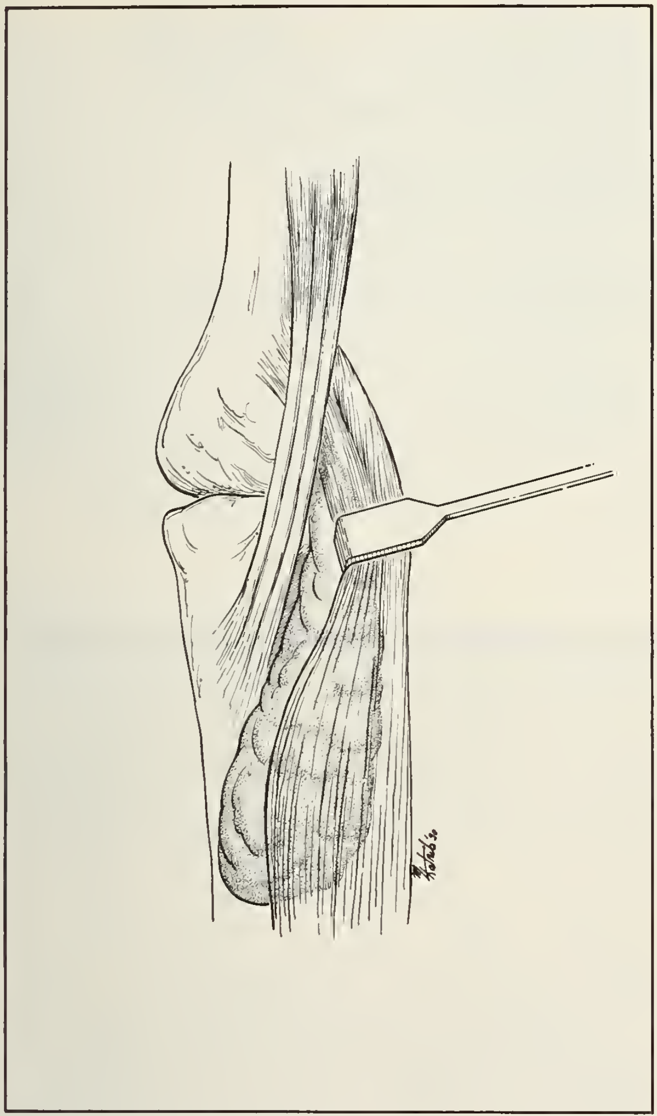

Fig. 1. The calf abscess cavity is seen to communicate with the semimembranous bursa.

Discussion

In adults, the knee joint and the posterior leg may communicate due to rupture of a Baker's cyst or via any of the three posterior bursae.[1,2] Experimental data from cadavaric knees has shown that the semimembranous bursa is the most likely of the three to rupture.[3]

The treatment of pediatric pyarthrosis remains controversial.[4-7] Aspiration, arthrotomy, and antibiotic therapy are, however, the mainstays of current therapy.

In this case, the swelling of the entire extremity made it impossible to detect a distinct knee effusion. However, the calf abscess was quite distinctive. Once the calf abscess was drained, the knee effusion became more apparent. The knee was therefore aspirated and subsequently opened. Only after the knee was opened and the calf wound explored was the route of development of the calf abscess obvious.

We present this case to alert orthopaedic surgeons to this unusual presentation of a knee pyarthrosis in a pediatric patient.

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Cancer of Prostate Metastatic to the Skin Diagnosed By Immunoperoxidase Staining

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The authors present a case in which the diagnosis of prostate cancer metastatic to the skin was made by skin biopsy with immunoperoxidase stains for prostatic specific antigen and prostatic acid phosphatase. These are tests that should be performed when the location of the primary malignancy is not otherwise evident.

Cutaneous metastases are often difficult to diagnose, particularly when identifying the primary origin of the cancer. We report immunoperoxidase staining is an important tool in pinpointing the prostate as the tumor of origin.

Adenocarcinoma of the prostate commonly metastasizes to lymph nodes, bone, lung, bladder and liver. Cutaneous metastases are seen in fewer than 5% of patients who die from internal carcinoma.[1-4] Prostate cancer metastatic to the skin is reportedly rare, although the true incidence is difficult to determine. Gates reviewed 2,298 autopsies of patients with internal malignancies. Only one out of five cancers metastatic to the skin was from the prostate.[2] Reingold's series of 2,300 cases of internal carcinoma reported a 1.4% rate of cutaneous metastases, three of which were from prostate cancer.[4] More recently, Kitagawa reported a 2% rate of cutaneous metastases in autopsy patients with prostate cancer.[5] The diagnosis of prostate cancer to the skin is usually a grave prognostic sign. There have been 34 cases reported to date.[6-10] The average survival period after the appearance of skin metastasis is less than one year.[11] There have been five reported cases of patients living from 13 months to six years after the appearance of skin metastases.[6-7,12-14]

Cutaneous metastases from prostate cancer are typically asymptomatic and appear as single or multiple solid nodules that may be pink or violaceous in color.[4,15-19] Metastases can be noncharacteristic, nonspecific and mimic non-malignant conditions. Stahl and Veien described a case of prostate cancer metastatic to the skin that mimicked pyodermas.[20] The most common sites for cutaneous metastases from prostate cancer are in the lower abdomen and inguinal regions. However, metastases have also been reported to the head and neck, heel, prepuce and chest, as in our case.[21] We describe a case in which metastatic prostate cancer was diagnosed by immunoperoxidase staining of a skin biopsy specimen.

Case Report

A 75-year-old man had a urinary outlet obstruction in 1975. A transurethral prostatectomy was performed for benign prostatic hypertrophy. In 1982, he underwent a second transurethral prostatectomy for recurrent symptoms. Biopsy re-

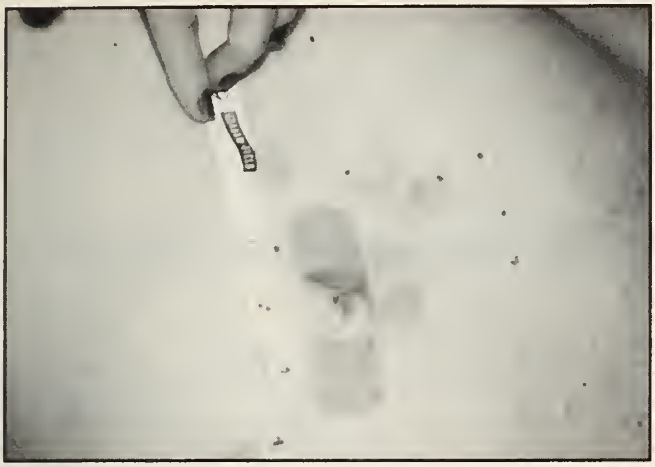

Fig. 1. Multiple indurated subcutaneous nodules on the lower sternum.

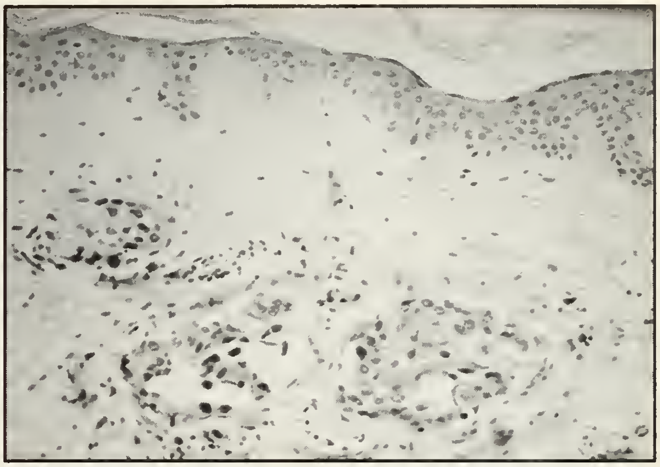

Fig. 2. Section of skin showing dermal lymphatic spaces occluded by nests of metastatic tumor cells. (H&E, 450x)

vealed adenocarcinoma of the prostate. He was treated with orchiectomy. In 1983 he was seen with a 50-pound weight loss over the past 12 months, recent anorexia, vomiting and a "burning" skin eruption on his chest of six months' duration. Physical examination showed indurated, erythematous subcutaneous nodules on the lower sternal region (Fig 1). Digital rectal examination showed the prostate was indurated, nodular and fixed. Large bilateral axillary nodes were also noted. Laboratory studies were remarkable for anemia and hypothyroidism. The skin biopsy revealed malignant glandular epithelial cells occluding numerous dermal lymphatic spaces (Fig 2). The tumor cells showed strong positive immunostaining for prostatic specific antigen and prostatic acid phosphatase (Fig 3). A bone scan showed multiple areas of increased uptake. The patient began therapy with diethylstilbestrol as well as a course of radiation to the cutaneous metastases, with only minimal response.

The patient died 10 months after the appearance of the skin metastases.

Discussion

Some internal malignancies are more likely to metastasize to skin and may be suggested by their histologic appearance. Renal cell carcinoma may be suggested by clear cells, vascular stroma, and tubule formation.[16] Well-differentiated serous ovarian carcinoma may have a papillary configuration and psammona bodies,[16] and poorly differentiated signet ring cell adenocarcinoma suggests the stomach or breast as a possible primary site.[16] However, in most cases the primary site cannot be determined with absolute certainty from the tissue studies. History of a previous carcinoma is usually the best clue to diagnosis.[16]

Immunohistochemistry has made major progress in the identification of metastatic adenocarcinoma of prostatic origin. The two separate antigens, prostatic specific antigen and prostatic acid phosphatase, are specific for benign and malignant prostatic epithelial tissues.[22-23] The sensitivity of prostatic acid phosphatase testing is 90%, and of prostatic specific antigen testing, 95%, with a combination of staining increasing sensitivity to 98%-99%. Our patient had a history of prostate cancer, but the site of the primary cancer was determined only after immunoperoxidase staining. An unusual aspect of our case was the symptom of burning in the metastatic skin lesions. To our knowledge, all other reported patients were asymptomatic. The erythema and burning sensation made this patient's disease easy to confuse with an inflammatory skin disease.

Appropriate immunoperoxidase staining should allow histological differentiation of metastatic cancer to the skin. With this staining technique, we propose that metastatic prostate cancer be added to the list of metastatic cancers in which the primary site of malignancy can be detected by skin biopsy. It is hoped that earlier detection of such lesions could lead to improved prognosis.

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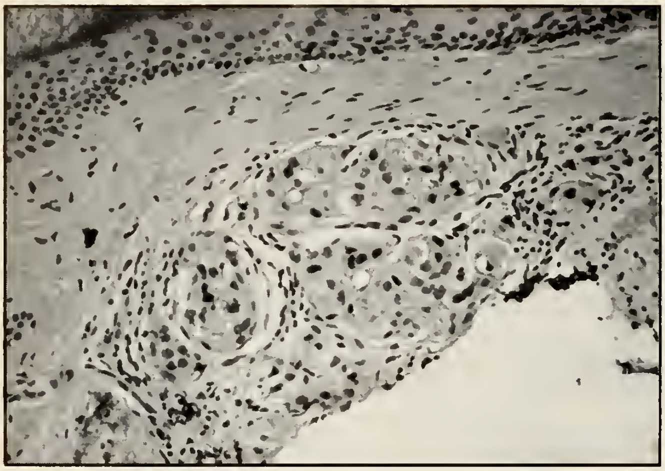

Fig. 3. Immunoperoxidase stain for prostatic specific antigen showing strong positive immunostaining of tumor cells occluding dermal lymphatic spaces. (450x)

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September

6 **Hoeper Seminar** — Location: Research Medical Center, Kansas City, MO. Contact: The Ed Bixby Institute for Postgraduate Medical Education, Research Medical Center, 2316 East Meyer Boulevard, Kansas City, MO 64132. 816/276-4306.

6-7 **Current Issues in Hemostasis and Blood Transfusion** — Location: Margaret McCormick Doisy Learning Resources Center, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

7 **Current Issues in Gynecologic Oncology: HPV and Lower Genital Tract Disease** — Location: St. Luke's Hospital, St. Louis, MO. Contact: Patty Fogertey, Program Coordinator, Dept. of Education, St. Luke's Hospital Institute for Health Education, 232 South Woods Mill Road, St.Louis, MO 63017. 314/542-4762.

7-8 **Masters Course in Laparoscopic Surgery - Featuring Laparoscopic Pelvic Lymphadenectomy** — Location: Midwest Urology Institute, St. Joseph, MO. Contact: Midwest Urology Institute, 1322 North 36th Street, St. Joseph, MO 64506. 816/232-6315.

8 - 11 **Faculty as Clinical Teacher** — Location: Cedar Creek Farm Conference Center, New Haven, MO. Contact: Judith L. O'Guin, St. John's Mercy Medical Center, 615 S. New Ballas Road, St. Louis, MO 63141-8277. 314/569-6290.

10 - 11 **Transesophageal Echocardiography Course** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

11 **Update on Lumbar Spinal Stenosis** — Location: von Gontard Conference Center, St.John's Mercy Medical Center, St. Louis, MO. Contact: Judith L. O'Guin, St. John's Mercy Medical Center, 615 S. New Ballas Road, St. Louis, MO 63141-8277. 314/569-6290.

11 - 13 **Focus on the Future - Adolescence in the 90s** — Location: Holiday Inn Convention Center, St. Louis, MO. Contact: Marilynn Jett or Alice Schawa, University of Missouri-Columbia, University Extension, 348 Hearnes Center, Columbia, MO 65211. 314/882-4038.

11 - 13 **Complex Coronary Angioplasty** — Location: The Ritz-Carlton Hotel, Kansas City, MO. Contact: Beth Paul, CME Office, Saint Luke's Hospital of Kansas City, Wornall Road at 44th, Kansas City, MO 64111. 1-800-451-3182 or 816/932-2301.

12 - 13 **VA Cardiology Seminar** — Location: MU Alumni Center, Columbia, MO. Contact: Barry Kling, University of Missouri School of Medicine, CME Office, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

12 - 14 **Workshop in Stress Echocardiography** — Location: The Walt Disney World Swan Hotel, Orlando, FL. Contact: Beth Paul, CME Office, Saint Luke's Hospital of Kansas City, Wornall Road at 44th, Kansas City, MO 64111. 1-800-451-3182 or 816/932-2301.

13 **Pulmonary Symposium: Update in COPD** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University Medical Center, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104-1083. 1-800-533-2712.

13 **Wendell G. Scott Lecture by George D. Lundberg, M.D., "Future Responsibilities of Medical Journalism"** — Location: Hyatt Regency, St. Louis, MO. Contact: R. Gilbert Jost, M.D., Chief of Diagnostic Radiology, Mallinckrodt Institute of Radiology, 510 S. Kingshighway, St. Louis, MO 63110. 314/362-7130.

13 - 14 **Management of Cardiac Emergencies** — Location: Helen F. Spencer Center for Education at Saint Luke's Hospital of Kansas City, Kansas City, MO. Contact: Beth Paul, CME Office, Saint Luke's Hospital of Kansas City, Wornall Road at 44th, Kansas City, MO 64111. 1-800-451-3182 or 816/932-2301.

18 - 20 **Pediatric Advanced Cardiac & Trauma Support For Life and Pediatric Advanced Life Support Course (PALS/PACTS)** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University Medical Center, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104-1083. 1-800-533-2712.

20 **Therapeutic Strategies for the Difficult to Treat Patient; Character Structure, Eating Disorders and Sexual Abuse** — Location: St. John's Mercy Medical Center, St. Louis, MO. Contact: Nancy Ellis-Ordway, St. John's Mercy Hospital Medical Center, 615 S. New Ballas Road, St. Louis, MO 63141-8277. 314/569-6898.

20 **Supportive Care of the Cancer Patient** — Location: St. Luke's Hospital Institute for Health Education, St. Louis, MO. Contact: Laura Klaus, Director of Professional Education, American Cancer Society, 1280 Research Blvd., St. Louis, MO 63132. 1-800-727-0395.

23 - 25 **Symposium on Aging, Musculoskeletal Disorders and Care of the Frail Elderly** —Location: Clarion Hotel, St. Louis, MO. Contact: Conference Secretary, VA Medical Center, GRECC (111G-JB), St. Louis, MO 63125, FTS 280-6510 or 314/894-6510.

25 **4th Annual Trauma Care Conference** — Location: von Gontard Conference Center, St. John's Mercy Medical Center, St. Louis, MO. Contact: Judith L. O'Guin, St. John's Mercy Medical Center, 615 S. New Ballas Road, St. Louis, MO 63141. 314/569-6290.

26 **Pediatric Penetrating Trauma** — Location: Adam's Mark Hotel, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

26 **The Thomas F. Maher Lecture in Radiology** — Location: von Gontard Conference Center, St. John's Mercy Medical Center, St.Louis, MO. Contact: Judith L. O'Guin, St. John's Mercy Medical Center, 615 S. New Ballas Rd., St. Louis, MO 63141. 314/569-6290.

27 - 28 **Advanced Trauma Life Support Provider Course** — Location: St. Louis University, Margaret McCormick Doisy Learning Resources Center, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand, St. Louis, MO 63104. 1-800-533-2712.

October

4 - 6 **Ozark Chest Conference XI, "New Therapies in Asthma Management and Pulmonary Thromboembolism"** — Location: Tan-Tar-A Resort Hotel, Lake of the Ozarks, MO. Contact: American Lung Association of Western Missouri, 2007 Broadway, Kansas City, MO 64108. 816/842-5242.

6 - 7 **Advanced Cardiac Life Support Provider Course** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University Medical Center, CME Office 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-533-2712.

8 - 9 **Primary Care of HIV Disease** — Location: The Ritz-Carlton, St. Louis, MO. Contact: Susan Wightman, R.N., Program Coordinator, Washington University School of Medicine, 4940 Audubon Ave., St. Louis, MO 63110. 314/362-2418.

8 - 10 **Introduction to Doppler Echocardiography** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

10 **Pediatric Advanced Life Support Recertification Course (PALS)** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University Medical Center, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104-1083. 1-800-533-2712.

10 - 11 **Nursing Microsurgery Workshop - Hands-On Experience** — Location: St. Louis University School of Medicine, St. Louis, MO. Contact: CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

10 - 12 **Black Health Care** — Location: Allis Plaza Hotel, Kansas City, MO. Contact: Barry Kling, University of Missouri School of Medicine, CME Office, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

11 - 12 **Cancer Symposium** — Location: Sheraton at Westport, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

13 - 16 **Faculty as Professional Advisor/Evaluator** — Location: Cedar Creek Farm Conference Center, New Haven, MO. Contact: Judith L. O'Guin, St. John's Mercy Medical Center, 615 S. New Ballas Rd., St. Louis, MO 63141. 314/569-6290.

14 **City-Wide Radiology Conference by Daniel K. Kido, M.D., "Functional Neuroanatomy of the Central Nervous System,"** — Location: Mallinckrodt Institute of Radiology, St. Louis, MO. Contact: R. Gilbert Jost, M.D., Chief of Diagnostic Radiology, Mallinckrodt Institute of Radiology, 510 S. Kingshighway, St. Louis, MO 63110. 314/362-7130.

14 - 18 **The Medicolegal Death Investigator Training Course** — Location: St. Louis University, Margaret McCormick Doisy Learning Resources Center, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

15 - 16 **27th Annual Postgraduate Symposium on Medicine and Religion - "Rites of Passage and Rights in Passage: Caring for America's Children** — Location: Battenfield Auditorium, University of Kansas Medical Center, Kansas City, KS. Contact: Monica Scheierman, University of Kansas Medical Center, Office of Continuing Education/SC100, Rainbow and Olathe Blvds., Kansas City, KS 66103. 913/588-4490.

18 - 19 **34th Alumni Weekend, University of Missouri** — Location: Columbia, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

18 - 20 **Microsurgery of the Lumbar and Cervical Spine** — Location: St. Louis University School of Medicine, St. Louis, MO. Contact: CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

24 - 27 **Protect Your Medical Practice: Effective Management of Abusable Medications** — Location: Westin Crown Center Hotel, Kansas City, MO. Contact: Barry Kling, University of Missouri School of Medicine, CME Office, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

25 - 26 **Endoscopic & Laser Surgery - "Advances, Complications and Controversies"** — Location: St. Luke's Hospital, St. Louis, MO. Contact: Patty Fogertey, Program Coordinator, Dept. of Education, St. Luke's Hospital Institute for Health Education, 232 South Woods Mill Rd., St. Louis, MO 63017. 314/542-4762.

29 - 30 **Second Annual Spinal Cord Injury Symposium From ICU To Rahab** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

November

4 - 6 **NIH Consensus Development Conference: Diagnosis and Treatment of Depression in Late Life** — Location: Masur Auditorium, The Warren Grant Magnuson Clinical Center, National Institutes of Health, Bethesda, MD. Contact: Conference Registrar, Prospect Associates, 1801 Rockville Pike, Suite 500, Rockville, MD 20852. 310/468-MEET or FAX: 310/770-5164.

5 - 6 **Transesophageal Echocardiography Course** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University Medical Center, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

6 **5th Annual Kansas City Lipid Club Symposium** — Location: Marriott-Overland Park Hotel, Overland Park, KS. Contact: Monica Scheierman, University of Kansas Medical Center, Office of Continuing Education/SC100, Rainbow and Olathe Blvds., Kansas City, KS 66103. 913/588-4490.

7 - 9 **69th Annual Fall Clinical Conference** — Location: Marriott Hotel, Overland Park, KS. Contact: Linda F. Smutz, Kansas City Southwest Clinical Society, 7920 Ward Parkway, Suite 205, Kansas City, MO 64114. 816/523-3383.

7 - 10 **Surgical Approaches to the Skull Base** — Location: St. Louis University School of Medicine, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

11 **City-Wide Radiology Conference by Robert Edelman,M.D., "Advances in Vascular MRI,"** — Location: Mallinckrodt Institute of Radiology, St. Louis, MO. Contact: R. Gilbert Jost, M.D., Chief of Diagnostic Radiology, Mallinckrodt Institute of Radiology, 510 S. Kingshighway, St.Louis, MO 63110. 314/362-7130.

13 **Update on Viral Hepatitis** -- Location: von Gontard Conference Center, St. John's Mercy Medical Center, St. Louis, MO. Contact: St. John's Mercy Medical Center, 615 S. New Ballas Rd., St. Louis, MO 63141. 314/569-6930.

13 - 15 **Pediatric Advanced Cardiac & Trauma Support For Life and Pediatric Advanced Life Support Course (PACTS/PALS)** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

15 - 16 **OB/GYN Update 1991** — Location: Holiday Inn Executive Center, Columbia, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

15 - 17 **18th Annual Symposium: Anesthesia and the Geriatric Patient** — Location: The Marriott Pavilion Hotel, St. Louis, MO. Contact: Geriatric Symposium, Dept. of Anesthesiology, Box 8054, Washington University School of Medicine, 660 S. Euclid, St. Louis, MO 63110. 314/362-6975.

16 - 19 **Southern Medical Association 85th Annual Scientific Assembly** — Location: Atlanta, GA. Contact: The Southern Medical Association, 1-800-423-4992.

17 - 20 **Faculty as Small and Large Group Teacher** — Location: Cedar Creek Farm Conference Center, New Haven, MO. Contact: Judith L. O'Guin, St. John's Mercy Medical Center, 314/569-6290.

December

7 **New Perspectives in the Management of Myocardial Ischemia** — Location: Ritz-Carlton of Kansas City, Kansas City, MO. Contact: Monica Scheierman, University of Kansas Medical Center, Office of Continuing Education/SC100, Rainbow and Olathe Blvds., Kansas City, KS 66103. 913/588-4490.

9 **City-Wide Radiology Conference by Michael T. Modic, M.D., "Degenerative Disk Disease and Low Back Pain,"** — Location: Mallinckrodt Institute of Radiology, St. Louis, MO. Contact: R. Gilbert Jost, M.D., Chief of Diagnostic Radiology, Mallinkcrodt Institute of Radiology, 510 S. Kingshighway, St. Louis, MO 63110. 314/362-7130.

13 **Postgraduate Symposium on Infectious Diseases** — Location: Hyatt Regency Hotel, Kansas City, MO. Contact: Monica Scheierman, University of Kansas Medical Center, Office of Continuing Education/SC100, Rainbow and Olathe Blvds., Kansas City, KS 66103. 913/588-4490.

January 1992

13 **City-Wide Radiology Conference** — Location: St. Louis University, St. Louis, MO. Contact: R. Gilbert Jost, M.D., Chief of Diagnostic Radiology, Mallinckrodt Institute of Radiology, 510 S. Kingshighway, St. Louis, MO 63110. 314/362-7130.

16 - 18 **American Academy of Pain Medicine's 1992 Annual Conference** — Location: Registry Hotel, Scottsdale, AZ. Contact: Carol Endicott, American Academy of Pain Medicine, 5700 Old Orchard Rd., First Floor, Skokie, IL 60077-1024. 708/966-9510.

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MSMA Patient Brochures Offer Information

MSMA has available several patient information brochures. Topics range from breast cancer treatment alternatives to health care cost containment. You may preview sample copies free of charge before ordering. Submit orders and sample requests, by title, on your professional letterhead, to **MSMA Brochures**, P.O. Box 1028, Jefferson City, MO 65102. Or, you may fax your orders to the MSMA office at 314/636-8552. Here are just a few of the titles:

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UNDERSTANDING MEDICARE. This is a new brochure that explains some of the complexities of the Medicare maze: qualifying, submitting claims, understanding terminology. The information is general and simple, so your Medicare patients and family can benefit. *Cost: 10 cents each.*

Medical School News

St. Louis University

■ Bethesda Eye Institute (BEI) at St. Louis University Medical Center is the only site throughout the United States to have received FDA approval for the testing of a minimally-invasive corneal implant designed to provide permanent correction for farsightedness, nearsightedness and possibly astigmatism. The implant is composed of a small plastic ring, called a corneal ring, which can be implanted within the cornea by means of a simple procedure. This is the first reversible surgical approach for correcting common vision problems.

Two other sites throughout the world are also conducting studies: Brazil and the Netherlands. **David J. Schanzlin, M.D.**, professor and chairman of the department of ophthalmology at St. Louis University School of Medicine, and chief executive of BEI, has been chosen to oversee all operations regarding this research at the two foreign sites as well as at BEI in St. Louis.

With the completion of testing, intrastromal rings would be available to patients on an outpatient basis through their local ophthalmologists.

■ Researchers in the department of neurology at St. Louis University School of Medicine are optimistic that an experimental electrical implant, called a programmable vagal nerve stimulator, could improve the quality of life for hundreds of patients suffering from partial epileptic seizures who are not able to control their seizures through standard therapy. The implant is designed much like the common pacemaker and appears to reduce the severity of epileptic seizures.

According to **Waqar Mirza, M.D.**, instructor in neurology and acting director of the Greater Midwest Epilepsy Treatment Center located in Bethesda Hospital, a number of anticonvulsant drugs are available, but many patients are not helped by the medications. The only other treatment option available to these patients is brain surgery. However, there are patients who are not good surgical candidates either, Dr. Mirza says. For these patients, the vagal nerve stimulator is an alternative choice.

More than 60 people nationwide have undergone the experimental procedure. Specifically, one-third have had their seizure frequency reduced by as much as 50%, with two patients becoming seizure-free for seven to 14 months. One of the two patients was even able to get a driver's license. The intensity and magnitude of seizures in another one-third of the patients was reduced, although the frequency remained the same. The final one-third showed no change.

Researchers are expected to make a full presentation to the Food and Drug Administration later this year.

■ **William J. Burke, M.D.**, associate professor of neurology at St. Louis University School of Medicine, has been awarded two three-year grants totalling $351,000 for ongoing research into the causes of Alzheimer's disease. The grants, from the National Institute on Aging and the Veterans Administration, will be used to examine the mechanism of cell death that occurs in patients with Alzheimer's disease.

Dr. Burke has been studying the aging process for more than 15 years and has made a number of advances in understanding what triggers brain cell degeneration. By studying a group of neurons that synthesizes epinephrine, a brain neurotransmitter used to relay messages, Dr. Burke has found evidence that the amount of epinephrine decreased in Alzheimer-diseased brains.

■ **Carmine J. Coscia, Ph.D.**, professor of biochemistry at St. Louis University School of Medicine, has been awarded two research grants totalling $277,818 for his research on opioid receptors in the brain.

A three-year grant from the National Institute on Drug Abuse for $257,818 will be used to fund Dr. Coscia's project titled "Differential Development of Opioid Receptors." Dr. Coscia is studying the development of opioid receptors found in the brain and applying the information gained to the study of maternal drug abuse and its effects on brain development of infants in the womb. He is also researching how new drugs that are being used to break or curb drug addiction will influence brain development in unborn babies.

A one-year grant from the state of Missouri for $20,000 will go toward Dr. Coscia's study titled, "Relative Distribution of Opioid and Cholinergic Receptors in Limbic Systems of Aged and Alzheimer Brain." Dr. Coscia is researching the change in the number of opioid receptors found in the brains of Alzheimer's victims. These receptors may control the release of chemicals in the brain that affect memory and learning.

■ **Govindaswamy Chinnadural, Ph.D.**, professor of molecular virology at the Institute for Molecular Virology at St. Louis University School of Medicine, received a Distinguished Service Award from the Tamil Nadu Foundation (TNF) for continued service in the field of medical research. The foundation is a 600-member organization in the United States promoting the exchange of educational, scientific and health-related issues among citizens with ties to the Tamil Nadu State in India.

Dr. Chinnadural has been researching the biological basis of cancer formation at the Institute since 1976. He is also studying the human immunodeficiency virus (HIV). Recently, he was named the recipient of more than $2.2 million in grants over the next five years from both the National Institute of Allergy and Infectious Diseases and the National Cancer Institute.

■ **Richard S. Kurz, Ph.D.**, associate professor and associate dean of the school of public health at St. Louis University Medical Center, has been named editor of *Hospital and Health Services Administration.* The quarterly journal is published by Health Administration Press (HAP), a division of the Foundation of the American College of Healthcare Executives.

This college is an international professional society of more than 24,000 health care executives based in Chicago. Its journal provides information from experts about the latest trends, developments and innovations in health care management.

■ **Michael R. Niesman, Ph.D.**, has been named research assistant professor in the department of ophthalmology at St. Louis University School of Medicine.

David J. Schanzlin, M.D., professor and chairman of the department of ophthalmology, and chief executive officer of Bethesda Eye Institute, says that Dr. Niesman's arrival and expertise strengthens BEI's long-standing commitment to support research into the causes and prevention of eye disease and blindness.

Dr. Niesman has conducted extensive research relating to new methods for delivering therapeutic drugs to the retina. He has focused on the development of drug carriers that will halt abnormal and excessive cell proliferation. That growth is the main cause of vision loss in patients whose retina fails to remain attached even after surgery.

Dr. Niesman comes to St. Louis University Medical Center from LSU Eye Center in New Orleans, where he recently completed a postdoctoral fellowship.

Washington University

■ **Marvin E. Levin, M.D.**, professor of clinical medicine and associate director of the metabolism and diabetes clinic, at the Washington University School of Medicine, was awarded the prestigious American Diabetes Association Award for Outstanding Physician Educator in the Field of Diabetes in 1991 at the recent joint meetings of the American Diabetes Association and The International Diabetes Federation in Washington, D.C. In 1979 he was named Outstanding Clinician in the Field of Diabetes by the American Diabetes Association.

Levin is an internationally known authority on diabetes and diabetic foot disease and has lectured internationally on these subjects. He is currently the Editor-in-Chief of *Clinical Diabetes* and an editor of *Diabetes Spectrum*, publications of the American Diabetes Association. Levin is a consultant to the United States Pharmacopeia Endocrine Panel, and served on the National Board of Directors of the National American Diabetes Association from 1984-1986.

■ Researchers at Washington University School of Medicine in St. Louis are seeking volunteers to participate in a study of an antiviral drug for the treatment of herpes zoster or shingles.

Researchers will evaluate an experimental drug to determine if it will halt the disease sooner than current medication and whether it can prevent the long-term pain often associated with shingles.

Forty volunteers over 18 years of age are needed for the study. Patients are to be evaluated within 72 hours of developing their shingles eruption. The study, directed by **Ann G. Martin, M.D.**, director of the Dermatology Outpatient Center, is being funded by Burroughs Wellcome Pharmaceutical Co.

Shingles, an often painful outbreak of skin sores, is the result of reactivation of the varicella zoster (chickenpox) virus. Approximately 300,000 cases of shingles occur each year in the United States.

The multi-center study will take place in numerous other U.S. centers as well as Spain, Italy, the United Kingdom and Canada. It will involve 1,400 participants who will be grouped and evaluated daily for seven days and at two weeks, three weeks and six months. Participants chosen for the study will receive free medication and medical evaluation. For more information call Sharon Jenkins, 314/362-2643.

■ Liver disease does not progress in patients with hepatitis B who have been treated successfully with interferon and other forms of antiviral therapy, according to a report in the July 14 *Annals of Internal Medicine.*

This is the first long-term study monitoring the liver biopsies of hepatitis B patients who have responded to treatment. Researchers at Washington University School of Medicine in St. Louis checked viral markers and biochemical evidence of the disease in blood over a two-to-seven-year period. Liver biopsies were then done and compared to pretreatment biopsies. While some inflammatory changes were still present, the disease itself had not progressed, says principal investigator **Robert P. Perrillo, M.D.**, professor of medicine and director of gastroenterology at the Veterans Administration Medical Center in St. Louis.

For this latest study, the researchers examined seven patients who had participated in one of three antiviral research studies between 1981 and 1989. All of the patients had tested positive for the hepatitis B virus at least six months prior to enrolling in the initial study and suffered chronic liver disease. Viral replication was halted spontaneously in two patients, and as a result of antiviral therapy in five patients, four of whom had received some type of interferon therapy. Liver function tests also showed the disappearance of hepatitis B e antigen, another indication that the disease is no longer active.

Overall, there was a 50% improvement in total liver activity when the follow up biopsy was done up to two years after the hepatitis B virus disappeared from blood; the improvement jumped to 83% when the second biopsy was performed after four years or more. Liver biopsies of seven additional patients who had participated in the same clinical trials, but not responded to treatment, were used for comparison.

■ **Michael A. Kass, M.D.,** professor of ophthalmology and visual sciences at Washington University School of Medicine in St. Louis, has been named editor-in-chief of the *American Journal of Ophthalmology.* He will assume duties January 1, 1992.

Kass, who is on staff at Barnes and St. Louis Children's hospitals at Washington University Medical Center, has worked with the journal since 1985, when he became an associate editor. Last year he became the abstract editor of the journal and a director of its publishing company.

The American Journal of Ophthalmology, which as been publishing since 1884, has had only six previous editors. Its current editor and publisher, **Frank W. Newell, M.D.,** has held the position since 1965.

The journal is one of the leading ophthalmic journals in the world. It has a circulation of 18,500 and is published by the Ophthalmic Publishing Co., owned by physicians and published for physicians in the field of ophthalmology. The journal has one of the largest international circulations of all medical journals published in the United States.

■ **John G. Csernansky, M.D.,** *Gregory B. Couch Associate Professor of Psychiatry* at Washington University School of Medicine in St. Louis, recently received the 1991 Judith Silver Memorial Young Scientist Award from the National Alliance for the Mentally Ill (NAMI).

Csernansky is the eighth scientist to receive the award, which is presented annually by NAMI to recognize and encourage young researchers in the pursuit of understanding severe mental illnesses. Established in 1985, the award includes a $1,000 stipend.

Csernansky is studying alternative drugs for schizophrenic patients who do not respond to neuroleptics. Neuroleptics, antipsychotic medications discovered in the 1950s, are widely used to treat delusions and hallucinations that are common with schizophrenia. He is also studying disease-related biochemical markers that are present in patients with severe schizophrenia and developing animal models that will enable direct measurement of specific elements of brain circuitry thought to be involved in schizophrenia.

In addition, Csernansky is involved in developing a clinical research ward at St. Louis' Malcolm Bliss Hospital to provide care for the severely mentally ill. The 25-bed ward will provide training for residents and fellows in the Department of Psychiatry at the School of Medicine.

Csernansky joined the School of Medicine faculty in 1990. He is an attending psychiatrist at Barnes and Jewish hospitals, sponsoring institutions of the Washington University Medical Center.

Based in Virginia, NAMI is a self-help/advocacy organization with more than 130,000 members and 1,000 affiliate groups nationwide working to improve the lives of persons with mental illness.

University of Missouri-Kansas City

■ **Dev Maulik, M.D., Ph.D.,** professor and vice chairman of obstetrics and gynecology, is editor-in-chief of the new *Journal of Maternal-Fetal Investigation,* published quarterly by Springer-Verlag, New York. The first issue was published in June.

Topics in the journal will include basic and clinical investigations pertaining to the physiology and pathology of conception, early pregnancy loss, physiological adaptation in pregnancy, immunology of pregnancy, medical diseases and substance abuse in pregnancy. Other topics include biomedical and biophysical diagnostic techniques for fetal and/or maternal surveillance, clinical trials and blind studies of various diagnostic and therapeutic interventions involving the pregnant mother and fetus, and epidemiological issues and health care policies related to maternal and infant health.

It is the official journal of the French Society of Ultrasound in Medicine and Biology, the International Perinatal Doppler Society, the Japanese Society of Biomedical Engineering in Obstetrics and Gynecology and the Spanish Association of Perinatal Medicine.

Within the past year, Dr. Maulik has been a visiting professor at the King's College School of Medicine, London, England, and at the Ultrasonic Institute, University of Zagreb, Dubrovnik, Yugoslavia. He also was a visiting professor at the National Cardiovascular Center, University of Tokyo, Japan, and was the first non-Japanese keynote speaker for an International Conference on Placenta Blood Flow there.

■ **Stephen Hamburger, M.D.,** associate dean of Academic Affairs and chairman of the Department of Medicine, was elected to a four-year term as a member-at-large on the National Board of Medical Examiners at the board's annual meeting in March. Dr. Hamburger also is the *Dr. Edward H. Hashinger Distinguished Professor of Medicine.*

■ **R. Stephen Griffith, M.D.,** assistant professor of Community Medicine and Family Practice, presented "Preoperative Evaluation-Medical Obstacles to Surgery" at the National Conference on Colorectal Cancer, New Orleans, La., in March 1991.

■ As a visiting professor at the

University of Illinois, Chicago, **Steven D. Waldman, M.D.**, clinical professor of anesthesiology, presented a special lecture on interventional pain management. He also has been appointed to the editorial board of *Pain Digest.*

■ **C. Keith Whittaker, M.D.**, clinical professor of surgery, gave a presentation on "The Effect of Solid Spinal Subarachnoid Clot" at the Rocky Mountain Neurosurgical Society Meeting at Jackson Hole, Wyo., in June 1991.

■ **Nabih I. Abdou, M.D., Ph.D.**, clinical professor of internal medicine, recently was awarded a $100,000 Cutter Miles Pharmaceutical grant to study anti-idiotypes in human gamma globulins. Dr. Abdou also authored "New Directions in Therapy of Lupus by Anti-idiotypes," a chapter in *Cytokines, Monoclonal Antibodies and Arthritis*, and "Detection and Isolation of Anti-Idiotypes Against Anti-DNA in Pooled Human Gamma Globulin," published in the *Journal of Clinical Immunology.*

■ **Uri Alon, M.D.**, associate professor of pediatrics, authored "The Kidney in Systemic Diseases I: Infectious, Hematologic Malignant, Liver and Metabolic Diseases," Barness, L.A., ed., *Advances in Pediatrics*, 37:207-260, Yearbook Medical Publishers. Chicago, Ill., 1990.

■ **Richardson K. Noback, M.D.**, professor emeritus of internal medicine, visited the University of Limburg and the University of Frieburg to discuss with faculty members expected competencies and specified evaluation procedures for medical school residents and students. He also recently chaired the National Scholarship Committee of the American Federation for Aging Research. The committee annually awards Dana Foundation Scholarships enabling medical students to study at outstanding university geriatric centers throughout the country.

■ **Charles Wilkinson, M.D.**, professor emeritus of psychiatry, was reappointed vice-chairman of Council on Internal Organization through its 1992 annual meeting. He also was reappointed to a three-year term as a member of the Committee on Advertisers and Exhibitors. He is president-elect of the Group for Advancement of Psychiatry and will assume the two-year term as president in 1993. Dr. Wilkinson also served as a group leader at the Conference of Cultural Issues and Psychiatric Diagnosis in Pittsburgh, Pa., in April 1991.

■ **Paul Williams, M.D.**, professor and chairman of Community Medicine and Family Practice, moderated a session on "Precursors of Colorectal and Anal Cancer" at the National Conference on Colorectal Cancer in New Orleans, La., in March 1991.

University of Missouri- Columbia

■ **Robert P. Burns, M.D.**, who has led the MU department of ophthalmology to a position of national respect during his 12 years as its chairman, recently retired.

He and his wife, **Lynette Feeney-Burns, Ph.D.**, also an MU professor of ophthalmology and a world leader in age-related macular degeneration research, will live near Sonoma, California after her September retirement. Dean **Lester Bryant, M.D.**, has appointed Professor **Joseph Giangiacomo, M.D.**, as interim chairman while a national search is conducted to find Burns' successor.

When Dr. Burns came to MU from the University of Oregon in 1979, he took on the task of rebuilding a department that was under probation. He quickly helped regain full accreditation for the residency training program and oversaw during the early and mid-1980s, the two-phase construction of the Mason Eye Institute, located adjacent to the University Hospital and Clinics' lobby.

A native of Portland, Oregon, Dr. Burns was a general practitioner in Waldport, Oregon, for three years before serving as a flight surgeon for the Air Force during the Korean War. He served on the University of Orgon's faculty for 20 years.

At MU, Dr. Burns holds the *Roy E. Mason Distinguished Professorship of Ophthalmology.* He has been medical and research director of the Lions Eye Research Foundation in Columbia since 1979.

■ **William J. Crowley, M.D.**, has stepped down from the chairmanship of the MU department of neurology to return to private practice in Columbia.

Crowley left his practice to accept the School of Medicine position in August 1988. In his new part-time role as clinical professor of neurology, he will continue his research and student teaching.

Pradeep K. Sahota, M.D., assistant professor of neurology, has been appointed interim chairman by Dean **Lester Bryant, M.D.**, until a successor is found. A national search will be conducted for candidates.

Crowley cited improved clinical productivity as one of his major accomplishments, including the addition of a state-of-the-art sleep lab and acquisitions for the clinical neurophysiology lab such as computerized and video electroencephalographs and evoked potentials technology for measuring activity in the brain stem and visual pathways. He also mentioned the department's greater involvment in student teaching, its improved physical environment and increased research productivity among his achievements.

■ The J. Otto Lottes Health Sciences Library is interested in augmenting its collection of very old and unusual medical books. MU department of surgery faculty contributed funds to create and furnish a rare books room that was dedicated recently.

According to **Donald Silver, M.D.**, chairman of surgery, by providing students with the ability to read some of the classics of medicine, the school hopes to make learning medical history fun and in turn, enable the students to be better physicians.

To be considered rare, most

medical books must have been published before 1800 in Europe and colonial America or before 1850 in the rest of the United States. The library already has many old medical textbooks, which are not regarded as rare, according to Director **Dean Schmidt**.

For information on donating books or funds to the rare book collection, please contact Schmidt at 329 Health Sciences Library, School of Medicine, Columbia, MO 65212, or call 314/882-7033.

■ **Jack M. Colwill, M.D.**, professor and chairman of the department of family and community medicine, has been named to an 18-member medical advisory panel for the Pew Health Professions Commission. The panel is one of seven recently formed to translate the commission's national agenda for reform in health professional education into more specific information for dissemination within the health professions and to the nation's health professional schools. The PEW Charitable Trusts is the country's second largest private grant maker.

■ **John Oro, M.D.**, associate professor and chief of the division of neurosurgery, has been re-elected treasurer of the Missouri State Neurosurgical Society and also is president-elect of the organization.

Other News

■ **George M. Bohigian, M.D.**, appeared on CNN's Crossfire on June 26, 1991, discussing the issue of testing for AIDS in patients and physicians. In this 30-minute debate, Dr. Bohigian suported the AMA's position on HIV testing for physicians, healthcare workers, and patients in an appropriate situation consistent with testing for other communicable diseases according to local guidelines. Dr. **Mervyn Silverman**, spokesman for the Foundation for AIDS Research, argued against routine testing for AIDS. Dr. Bohigian, author and Missouri Delegate to the AMA, introduced the resolution calling for routine testing which stirred this controversy at the annual AMA meeting in Chicago on June 23-27, 1991. The MSMA, at their annual meeting, developed this resolution to be forwarded to the AMA. The AMA adopted the position to recommend the testing of patients, physicians, and health care workers. In addition, further recommendations relating to specific situations, the frequency of testing, etc. are to be developed and reported back at the Interim meeting in 1991, as well as encouraging the education of the patients and the public about the limited risk of HIV transmission. The AMA stopped short of mandatory testing since it was felt that guidelines could be developed at a local level when situations were appropriate. A complete report will be in a forthcoming issue.

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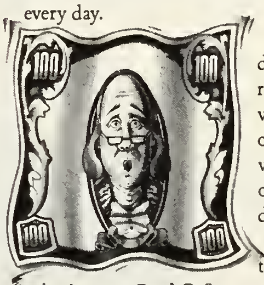

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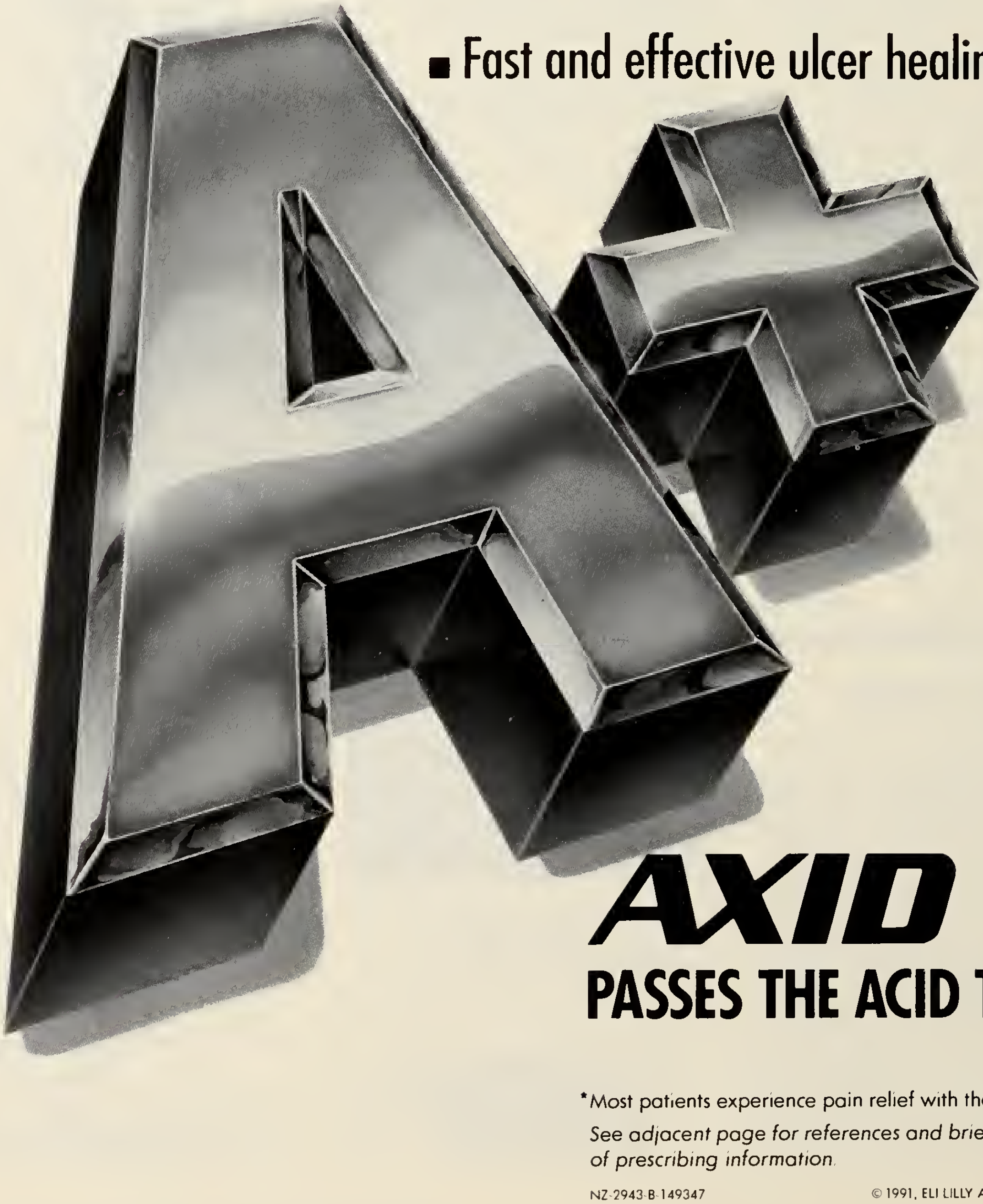

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Laboratory Tests—False-positive tests for urobilinogen with Multistix® may occur during therapy

Drug Interactions—No interactions have been observed with theophylline, chlordiazepoxide, lorazepam, lidocaine, phenytoin, and warfarin. Axid does not inhibit the cytochrome P-450 enzyme system, therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin daily, increased serum salicylate levels were seen when nizatidine, 150 mg t.i.d., was administered concurrently

Carcinogenesis, Mutagenesis, Impairment of Fertility—A 2-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a 2-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high-dose males as compared with placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups. The rate of hepatic carcinoma in the high-dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement as compared with concurrent controls and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given an excessive and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery are not considered evidence of a carcinogenic potential for Axid

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, mouse lymphoma assay, chromosome aberration tests, and a micronucleus test.

In a 2-generation, perinatal and postnatal fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy—Teratogenic Effects—Pregnancy Category C—Oral reproduction studies in rats at doses up to 300 times the human dose and in Dutch Belted rabbits at doses up to 55 times the human dose revealed no evidence of impaired fertility or teratogenic effect; but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in 1 fetus, and at 50 mg/kg, it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in 1 fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers—Studies in lactating women have shown that 0.1% of an oral dose is secreted in human milk in proportion to plasma concentrations. Because of growth depression in pups reared by treated lactating rats, a decision should be made whether to discontinue nursing or the drug, taking into account the importance of the drug to the mother

Pediatric Use—Safety and effectiveness in children have not been established

Use in Elderly Patients—Healing rates in elderly patients were similar to those in younger age groups as were the rates of adverse events and laboratory test abnormalities. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Clinical trials of varying durations included almost 5,000 patients. Among the more common adverse events in domestic placebo-controlled trials of over 1,900 nizatidine patients and over 1,300 on placebo, sweating (1% vs 0.2%), urticaria (0.5% vs <0.01%), and somnolence (2.4% vs 1.3%) were significantly more common with nizatidine. It was not possible to determine whether a variety of less common events were due to the drug.

Hepatic—Hepatocellular injury (elevated liver enzyme tests or alkaline phosphatase) possibly or probably related to nizatidine occurred in some patients. In some cases, there was marked elevation (>500 IU/L) in SGOT or SGPT and, in a single instance, SGPT was >2,000 IU/L. The incidence of elevated liver enzymes overall and elevations of up to 3 times the upper limit of normal, however, did not significantly differ from that in placebo patients. All abnormalities were reversible after discontinuation of Axid. Since market introduction, hepatitis and jaundice have been reported. Rare cases of cholestatic or mixed hepatocellular and cholestatic injury with jaundice have been reported with reversal of the abnormalities after discontinuation of Axid

Cardiovascular—In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in 2 individuals administered Axid and in 3 untreated subjects.

CNS—Rare cases of reversible mental confusion have been reported

Endocrine—Clinical pharmacology studies and controlled clinical trials showed no evidence of antiandrogenic activity due to nizatidine. Impotence and decreased libido were reported with equal frequency by patients on nizatidine and those on placebo. Gynecomastia has been reported rarely

Hematologic—Fatal thrombocytopenia was reported in a patient treated with nizatidine and another H_2-receptor antagonist. This patient had previously experienced thrombocytopenia while taking other drugs. Rare cases of thrombocytopenic purpura have been reported

Integumental—Sweating and urticaria were reported significantly more frequently in nizatidine- than in placebo-treated patients. Rash and exfoliative dermatitis were also reported

Hypersensitivity—As with other H_2-receptor antagonists, rare cases of anaphylaxis following nizatidine administration have been reported. Rare episodes of hypersensitivity reactions (eg, bronchospasm, laryngeal edema, rash, and eosinophilia) have been reported

Other—Hyperuricemia unassociated with gout or nephrolithiasis was reported. Eosinophilia, fever, and nausea related to nizatidine have been reported.

Overdosage: Overdoses of Axid have been reported rarely. If overdosage occurs, activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. Renal dialysis does not substantially increase clearance of nizatidine due to its large volume of distribution.

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References

1. Data on file, Lilly Research Laboratories.
2. *Scand J Gastroenterol* 1987;22(suppl 136):61-70.
3. *Scand J Gastroenterol* 1987;22(suppl 136):47-55.
4. *Am J Gastroenterol* 1989;84:769-774

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Resident Section News

MSMA-RPS Begins New Year, Sets New Goals

New members of the Governing Council of the MSMA Resident Physicians Section were elected April 2 in Kansas City at the annual meeting of the MSMA-RPS. The 1991-92 Governing Council Members are:

MSMA Councilor:
Bob McQuillan, M.D.
Dept. of Anesthesiology
St. Luke's Hospital, 44th & Wornall
Kansas City, MO 64111
816/932-2000

MSMA Vice Councilor:
Karen E. Zanol, M.D.
Division of Dermatology
UMC Hospital and Clinics
1 Hospital Drive
Columbia, MO 65212
314/882-3141 or 882-4141

President:
Chris Pittman, M.D.
Dept. of Radiology
St. Louis University Hospital
3635 Vista, P.O. Box 15250
St. Louis, MO 63110
314/577-8025

Vice President:
Mark Brinkman, M.D.
Dept. of Anesthesiology
St. Luke's Hospital, 44th & Wornall
Kansas City, MO 64111
816/932-2000

Secretary:
Robert Swanson, M.D.
St. John's Mercy Medical Center
615 New Ballas Road South
Creve Coeur, MO 63141
314/569-6000

Treasurer:
Stephen Olson, M.D.
Dept. of Anesthesiology
St. Luke's Hospital, 44th & Wornall
Kansas City, MO 64111
816/932-2000

Member at Large:
Maria L. Evans, M.D.
Dept. of Pathology
UMC Hospital and Clinics
1 Hospital Drive
Columbia, MO 65212
314/882-1201 or 882-4141

Member at Large:
Ira Landsman, M.D.
Dept. of Anesthesiology
St. Luke's Hospital, 44th & Wornall
Kansas City, MO 64111
816/932-2000

Chief AMA Delegate:
Jon Welsh, M.D.
Baptist Medical Center
6601 Rockhill Road
Kansas City, MO 64131
816/276-7600

Alternate Chief AMA Delegate:
Van Le, M.D.
Dept. of Radiology
St. Louis University Hospital
3635 Vista, P.O. Box 15250
St. Louis, MO 63110
314/577-8025

The Governing Council met June 2 in Columbia to outline overall plans and goals for MSMA-RPS. A major task in the coming year will be to increase membership significantly, particularly through new house staff orientation programs. To do this, it will be necessary to develop a network of resident contacts at each training institution. If you are interested in becoming a contact person at your program, please call Chris Pittman and let him know you are interested.

MSMA House of Delegates Passes RPS-Sponsored Resolution

An RPS-sponsored resolution dealing with availability of disability insurance was passed by the House of Delegates at the MSMA's 1991 annual meeting, held in Kansas City April 1-3. Resolution #29 states the following:

1. That the MSMA join the AMA in encouraging training institutions and hospitals to work to make available affordable, adequate disability insurance to resident physicians;
2. That the MSMA strongly encourage Missouri's training institutions and hospitals to widen the availability of disability insurance coverage for residents; and finally,
3. To empower the MSMA to meet with representatives of the insurance industry to explore the feasibility of making available supplemental disability coverage for an appropriate premium to residents who wish to purchase additional coverage.

Resolution #29 provides a well-needed boost to help solve what has been a difficult problem for many residents. Congratulations to those residents who worked on the construction and presentation of this resolution.

Upcoming MSMA-RPS Governing Council Meetings

Sunday, October 6, 11 a.m. –
M243, University Hospital and Clinics, Columbia, MO

Saturday, December 7, (TBA)
AMA Interim Meeting, Las Vegas, NV

Sunday, February 2, 1991, 12 noon
M243, University Hospital and Clinics, Columbia, MO

Saturday, April 11 (TBA)
MSMA Annual Meeting, St. Louis, MO

Sunday, May 17, 11 a.m.
M243, University Hospital and Clinics, Columbia, MO

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Resident Section News
continued from page 656

Maria Evans Takes Reigns as RPS News Editor

Maria Evans, M.D., a pathology resident at the University of Missouri-Columbia Hospital and Clinics, will serve as editor of the RPS News for the following year. A long-time active participant in the MSMA as a student member, Dr. Evans aims to increase participation at the resident physician level. She welcomes any and all information for inclusion in RPS News, suggestions for topics in future RPS newsletters, and essays/editorials from RPS members. You may send any information to: **Maria L. Evans, M.D.,** Department of Pathology, M263, University Hospital and Clinics, One Hospital Drive, Columbia, MO 65212; or call at 314/882-1201.

Minutes of the MSMA RPS Governing Council
Saturday, June 22, Chicago, IL

The meeting of the RPS Governing Council was called to order by President C. Chris Pittman, M.D., at 12:20 p.m., at the 8th Street Deli and Bar in Chicago, Il. Other members present included: Mark Brinkman, M.D., Karen Zanol, M.D., Robert McQuillan, M.D., and Maria L. Evans, M.D.

Following a report of the Treasurer, Dr. Evans reported that she has submitted information for the RPS News section in *Missouri Medicine*, and she encouraged the other members of the Governing Council to submit essays about timely topics of interest to residents for future inclusion.

Preparations are underway for providing MSMA enrollment applications to new interns within the state. Governing council members will attempt to contact society executives in Kansas City, St. Louis, Columbia, and Springfield for assistance.

The meeting was adjourned at 12:50 p.m. ■

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fu·ture | fyōō chər | adj [illegible] about to be—more at [illegible] 1: that is to be; [illegible] death 2: of, relating to, or constituting a verb tense [illegible] of time yet to come

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New Members

■ **David A. Ball, M.D.**, 151 Jefferson Davis Blvd., Natchez, MS 39120, has become a member of the Jasper County Medical Society. Dr. Ball received his preliminary education at the University of Kansas and obtained his medical degree at the University of Kansas School of Medicine in 1961. He completed his residency at Children's Mercy Hospital, Kansas City, MO. Dr. Ball specializes in orthopedic surgery.

■ **Lyle G. Breeding, M.D.**, 3401 Berrywood Dr., Suite 104, Columbia 65201, has become a member of the Boone County Medical Society. Dr. Breeding received his preliminary education at the University of Kentucky and obtained his medical degree at the University of Kentucky School of Medicine in 1980. He completed his residency at the University of Kentucky School of Medicine, Lexington, KY. Dr. Breeding specializes in general surgery.

■ **Gary L. Carter, M.D.**, 2800 Hospital Drive, North Kansas City 64116, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. Carter received his preliminary education at Northwest Missouri State University and obtained his medical degree at the University of Missouri-Kansas City School of Medicine in 1984. He completed his residency at Humana Hospital, Louisville, KY. Dr. Carter specializes in emergency medicine.

■ **Christine C. Cernik, M.D.**, 1034 S. Brentwood Blvd., Suite 946, St. Louis 63117, has become a member of the St. Louis Metropolitan Medical Society. Dr. Cernik obtained her medical degree at Rush Medical School in 1983. She completed her residency at Barnes Hospital, St. Louis, MO. Dr. Cernik specializes in obstetrics/gynecology.

■ **David B. Dunn, M.D.**, 118 Westwoods Dr., Liberty 64068, has become a member of the Missouri State Medical Association. Dr. Dunn received his preliminary education at Texas A&M University and obtained his medical degree at the University of Texas Health Sciences Center in 1985. He completed his residency at Scott & White Memorial Hospital, Temple, TX. Dr. Dunn specializes in peripheral and vascular surgery.

■ **Marla J. Floyd, M.D.**, 3231 S. National, Springfield 65807, has become a member of the Greene County Medical Society. Dr. Floyd received her preliminary education at Bethany Nazarene College and obtained her medical degree at the University of Nebraska Medical Center in 1983. She completed her residency at Oklahoma Children's Memorial Hospital, Oklahoma City, OK. Dr. Floyd specializes in pediatrics.

■ **William D. Harris, D.O.**, 9150 E. 41st Terr., Kansas City 64113, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. Harris received his preliminary education at the University of Iowa and obtained his osteopathic degree at the University of Health Sciences in 1982. He completed his residency at St. Luke's Hospital, Kansas City, MO. Dr. Harris specializes in internal medicine.

■ **Robert M. Heaney, M.D.**, 3660 Vista, St. Louis 63110, has become a member of the St. Louis Metropolitan Medical Society. Dr. Heaney received his preliminary education at Creighton University and obtained his medical degree at the Creighton University School of Medicine in 1978. He completed his residency at St. Louis University, St. Louis, MO. Dr. Heaney specializes in internal medicine.

■ **Anne L. Jones, M.D.**, 1000 E. 50th St., Suite 350, Kansas City 64114, has become a member of the Missouri State Medical Association. Dr. Jones received her preliminary education at the University of Nebraska and obtained her medical degree at the University of Nebraska College of Medicine in 1983. She completed her residency at Kansas University Medical Center, Kansas City, KS. Dr. Jones specializes in internal medicine.

■ **Roy N. Kohler, M.D.**, 1900 S. National, Springfield 65804-2275, has become a member of the Greene County Medical Society. Dr. Kohler received his preliminary education at the University of Missouri-Columbia and obtained his medical degree at the University of Missouri-Columbia School of Medicine in 1987. He completed his residency at the University of Iowa Hospitals and Clinics, Iowa City, IA. Dr. Kohler specializes in internal medicine.

■ **Jeffrey B. Kramer, M.D.**, #2203, 4949 Rockhill Road, Kansas City 64110, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. Kramer received his preliminary education at Haverford College and obtained his medical degree at the Washington University School of Medicine in 1980. He completed his residency at Barnes Hospital, St. Louis, MO. Dr. Kramer specializes in thoracic and cardiovascular surgery.

■ **J. Perry Lovinggood, M.D.**, 12255 DePaul Dr., Bridgeton 63046, has become a member of the St. Louis Metropolitan Medical Society. Dr. Lovinggood obtained his medical degree at the University of Missouri-Columbia School of Medicine in 1982. He completed his residency at Deaconess Hospital, St. Louis, MO. Dr. Lovinggood specializes in urology.

■ **Timothy J. McDermott, M.D.**, 14 Doctors' Park, Cape Girardeau 63701, has become a member of the Cape Girardeau County Medical Society. Dr. McDermott received his preliminary education at Rhodes College and obtained his medical degree at the University of Tennessee in 1980. He completed his residency at Baptist Memorial Hospital, Memphis, TN. Dr. McDermott specializes in cardiology.

■ **Kurt D. Merkel, M.D.**, 439 S. Kirkwood Rd., Suite 215, St. Louis 63122, has become a member of the Missouri State Medical Association. Dr. Merkel obtained his medical degree at the St. Louis University School of Medicine in 1980. He completed his residency at the Mayo Clinic Graduate School of Medicine, Rochester, MN. Dr. Merkel specializes in orthopedics.

■ **Brent W. Miedema, M.D.**, One Hospital Drive, Columbia 65212, has become a member of the Boone County Medical Society. Dr. Miedema received his preliminary education at North Dakota State University and obtained his medical degree at the Cornell University Medical Center in 1979. He completed his residency at New York Hospital, New York, NY. Dr. Miedema specializes in general surgery.

■ **John S. Munro, M.D.**, 600 E. 22nd Street, Kansas City 64108, has become a member of the Missouri State Medical Association. Dr. Munro received his preliminary education at Emory University and obtained his medical degree at Emory University School of Medicine in 1981. He completed his residency at the University of Virginia, Charlottesville, VA. Dr. Munro specializes in psychiatry.

■ **Rickey E. Nagy, M.D.**, Suite T107, 6420 Prospect, Kansas City 64132, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. Nagy received his preliminary education at Oklahoma University and obtained his medical degree at the Oklahoma University Medical Center in 1978. He completed his residency at Truman Medical Center, Kansas City, MO. Dr. Nagy specializes in obstetrics/gynecology.

■ **Steven E. Newbold, M.D.**, 11201 Colorado, Kansas City 64137, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. Newbold received his preliminary education at Southwest Missouri State University and obtained his medical degree at the University of Missouri-Columbia School of Medicine in 1986. He completed his residency at Goppert Family Care Center, Kansas City, MO. Dr. Newbold specializes in family practice.

■ **Clifton B. O'Meara, M.D.**, 2301 S. Ingram, Sedalia 65301, has become a member of the Pettis County Medical Society. Dr. O'Meara received his preliminary education at the University of Texas and obtained his medical degree at the University of Texas Medical Branch in 1986. He completed his residency at the University of Arizona Health Center, Tucson, AZ. Dr. O'Meara specializes in orthopedic surgery.

■ **Stephen C. Salanski, M.D.**, 805 NE Rice Road, Lee's Summit 64063, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. Salanski received his preliminary education at the University of Kansas and obtained his medical degree at the University of Missouri-Columbia School of Medicine in 1983. He completed his residency at Baptist Medical Center, Kansas City, MO. Dr. Salanski specializes in family practice.

■ **Alan R. Schneider, M.D.**, 12303 DePaul Dr., Bridgeton 63117, has become a member of the St. Louis Metropolitan Medical Society. Dr. Schneider obtained his medical degree at the State University of New York in 1981. He completed his residency at SUNY Downstate, New York, NY. Dr. Schneider specializes in anesthesiology.

■ **Brent V. Stromberg, M.D.**, 11709 Old Ballas Rd., St. Louis 63141, has become a member of the Missouri State Medical Association. Dr. Stromberg received his preliminary education at Brigham Young University and obtained his medical degree at the Washington University School of Medicine in 1975. He completed his residency at Case Western Reserve University, Cleveland, OH. Dr. Stromberg specializes in plastic surgery.

■ **Charles R. Venneman, M.D.**, 1000 Carondelet Dr., Kansas City 64114, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. Venneman received his preliminary education at the University of Kansas and obtained his medical degree at the University of Kansas School of Medicine in 1986. He completed his residency at the Mayo Clinic, Rochester, MN. Dr. Venneman specializes in anesthesiology.

■ **Montgomery A. Verona, M.D.**, 1000 E. Primrose, Suite 310, Springfield 65807, has become a member of the Greene County Medical Society. Dr. Verona received his preliminary education at Southwestern University and obtained his medical degree at the University of Texas Medical Branch in 1986. He completed his residency at the University of Texas Medical Branch, Galveston, TX. Dr. Verona specializes in neurology.

■ **George D. Wohlschlaeger, D.O.**, 4627 Shepherd Hills Rd., #318, Jefferson City 65101, has become a member of the Cole County Medical Society. Dr. Wohlschlaeger received his preliminary education at Washington University and obtained his osteopathic degree at the Kansas City College of Osteopathic Medicine and Surgery in 1955. He completed his residency at the Normandy Osteopathic Hospital, St. Louis, MO. Dr. Wohlschlaeger specializes in general practice.

■ **Nezaam M. Zamah, M.D.**, Suite 650B, 3101 Broadway, Kansas City 64111, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. Zamah received his preliminary education at McGill University and obtained his medical degree at the University of the West Indies in 1975. He completed his residency at the University of Ottawa, Ottawa, Ontario, Canada. Dr. Zamah specializes in reproductive endocrinology.

Resident Section

Nizar A. Assi, M.D. — *internal medicine*
David B. Griffin, M.D. — *unknown*
James W. McDowell, M.D. — *unknown*
Patricia A. McGuire, M.D. — *plastic and reconstructive surgery*
Carla S. Paul, M.D. — *unknown*
Tamzin A. Rosenwasser, M.D. — *internal medicine*
Trent Russell, M.D. — *pediatrics*
Keith F. Woeltje, M.D. — *internal medicine*
David J. Sauls, M.D. — *psychiatry*
Corydon W. Siffring, M.D. — *critical care*
Eric J. Stelnicki, M.D. — *plastic surgery*
Jordan B. Sterns, M.D. — *radiation oncology*
Jeane M. Trimmer, M.D. — *pediatrics*

Student Section

Washington University

Christopher A. Brown

University of Missouri-Kansas City

Julie Anderson
Lisa K. Fitzpatrick
Tim Stout
Daniel H. Tobias
Amy L. Voelker

University of Missouri-Columbia

Mark R. Briesacher
Pamela J. Downing
Diane M. Eschmann
Michael L. Novotney
Elizabeth A. Swaykus

Other Medical Schools

Nancy B. Lipsitz
Kenneth C. Onwere

Missouri State Medical Association Receives AMA Membership Award

Above: **MSMA President Dorothy D. Reister, M.D., accepts a plaque from AMA Immediate Past-President C. John Tupper, M.D., in recognition of the eighth consecutive year of increased American Medical Association (AMA) membership in Missouri.**

In Memoriam

■ **Morris Abrams, M.D.,** died June 16, 1991 at the age of 78. Dr. Abrams, a urologist, practiced medicine in St. Louis for more than 35 years before retiring in 1987. He served as the chief of urology at the Old Phillips Hospital in north St. Louis from 1950 to 1974 and also served in that position at Jewish Hospital from 1982 until his retirement. He was a clinical professor of urological surgery at the Washington University School of Medicine. He obtained his medical degree at the University of Illinois School of Medicine in 1938. Dr. Abrams was a member of the St. Louis Metropolitan Medical Society.

■ **James R. Meador, Sr., M.D.,** died July 7, 1991 at the age of 82. Dr. Meador, a general surgeon, practiced medicine in St. Louis for more than 30 years before retiring in 1969. He was a retired captain in the Navy, serving in World War II and for 35 years in the Naval Reserve. He obtained his medical degree at the St. Louis University School of Medicine in 1934. Dr. Meador was a member of the St. Louis Metropolitan Medical Society.

■ **Sidney F. Pakula, M.D.,** died July 7, 1991 at the age of 86. Dr. Pakula, a pediatrician, practiced medicine in Kansas City for more than 40 years. A former associate clinical professor of pediatrics at the University of Kansas Medical Center, he retired in 1988 as a professor emeritus of pediatrics from the University of Missouri-Kansas City School of Medicine. He taught at UMKC for 17 years. He obtained his medical degree at the Washington University School of Medicine in 1929. Dr. Pakula was a member of the Metropolitan Medical Society of Greater Kansas City.

■ **Ernest K. Robinson, M.D.,** died July 6, 1991 at the age of 86. Dr. Robinson, a surgeon and cancer specialist, practiced medicine in Kansas City from 1932 until he retired in 1975. He founded the city's first cancer clinic at General Hospital and directed the hospital's cancer service until 1964. He was a pioneer in the use of radium for cancer treatment. He obtained his medical degree at the University of Pennsylvania Medical School in 1929. Dr. Robinson was a member of the Metropolitan Medical Society of Greater Kansas City.

■ **John Platz, M.D.,** died June 21, 1991 at the age of 84. Dr. Platz, a general practitioner, practiced medicine in Carrollton for many years before retiring in 1988. From 1941 through 1945 he served with the United States Medical Corps in several locations, including Washington, D.C., Sydney, Australia, Milne Bay, New Guinea and the Phillipines. He obtained his medical degree at the Washington University School of Medicine in 1932. Dr. Platz was a member of the Grand River County Medical Society.

■ **Eugene J. Schwartz, M.D.,** died May 9, 1991 at the age of 85. Dr. Schwartz, a pediatrician, practiced medicine in Springfield for almost 50 years. He obtained his medical degree at the St. Louis University School of Medicine in 1931. Dr. Schwartz was a member of the Greene County Medical Society.

■ **Herbert H. Shuey, M.D.,** died June 12, 1991 at the age of 90. Dr. Shuey, a general practitioner, practiced medicine in the Kansas City area for 35 years and was a member of the Trinity Lutheran Hospital staff before he retired in 1984. He also was a psychologist at the Boys Industrial School in Topeka, Kansas and taught psychology at Rockhurst College until 1982. He obtained his medical degree at the University of Kansas Medical Center in 1945. Dr. Shuey was a member of the Metropolitan Medical Society of Greater Kansas City.

Physician's Recognition Awards

Thirty-eight MSMA members qualified for the MSMA-AMA Physician's Recognition Award during May 1991. The award, presented by the Missouri State Medical Association and the American Medical Association, is given to those physicians who voluntarily complete 150 credit hours of continuing medical education within a three-year period. Sixty of the credit hours must be earned in Category 1 programs.

Boone

Wm. James Crowley, *Columbia*

Butler-Wayne-Ripley-Carter

Robert C. Engelhardt, *Poplar Bluff*
Devendra K. Varma, *Poplar Bluff*

Callaway

Wm. Paul Cravens, *Fulton*

Clay-Platte

Ekkehard Othmer, *Kansas City*

Cole

John E. Ragland, *Linn*

Greene

Mark J. Bult, *Springfield*
Ronald L. Ellis, *Springfield*
John F. Ferguson, *Springfield*
John W. Goodwin, *Springfield*
Sally L. Hubbard, *Springfield*
Jay L. Milne, *Springfield*
Dean R. Rising, *Springfield*
John A. Sullivan, *Springfield*

Jasper

Frank Wm. Shagets, *Joplin*
Sitaraman Subramanian, *Carthage*

Metro Med of Greater Kansas City

Wm. Kent Barr, *Kansas City*
Kenneth A. Buchwach, *Independence*
Robert D. Conn, *Kansas City*
Louis H. Forman, *Kansas City*
Violet B. Matovich, *Kansas City*
Joseph C. Parker, *Kansas City*
Daniel L. Schlozman, *Kansas City*
James A. Thorp, *Kansas City*
James S. Zarr, *Kansas City*

Ozarks

Wilbur D. Dabbs, *Neosho*

SEMO

Grinny H.C. Ho, *Sikeston*

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Final Disciplinary Actions

The following is a listing of final disciplinary actions taken by the State Board of Registration for the Healing Arts. The listing includes actions finalized through February 1991. This information is made available to the public under the provisions of Section 334.101 RSMo.

■ **JOSE BENITEZ M.D.,** *St. Louis, MO*
Failed to conduct a complete pre-operative pulmonary evaluation on a 63-year-old patient.
Violation: 334.100.s(5) RSMo
Board Action: 2/25/91 — Reprimand

■ **RICHARD E. DRAPER, D.O.,** *Lee's Summit, MO*
Failed to obtain patient's medical history and do appropriate workup. He did a liver biopsy without review of the patient's prior medical records. The only assessment he made of the patient before the procedure was an assessment of clotting time, which at 13 seconds he considered to be adequate. He did the procedure with the presence of ascites and thrombocytopenia.
Violation: 334.100.2(5) RSMo Supp. 1990
Board Action: 3/22/91 — Reprimand

■ **TEDDY M. HALEY, M.D.,** *Kansas City, MO*
Prescribing controlled drugs without adequate patient workup. He prescribed controlled drugs without:
(1) Physician/patient relationship
(2) Documentation of workup or followup.
Violation: 334.100.2(4h), RSMo Supp. 1990
Board Action: Two (2) week suspension followed by a five (5) year probation with terms and conditions. Effective 4/14/91

■ **GREGORY K. IVINS, M.D.,** *Fulton, MO*
Inadequate pre-operative workup; subjected high risk patient to extensive surgical procedure.
Violation: 334.100.2(5) RSMo
Board Action: 3/6/91 — Reprimand

■ **MARY JO CRAWFORD, D.O.,** *Hayti, MO*
Board Action: Termination of probation. Effective 11/10/90

■ **DAVID P. DOLAN, M.D.,** *Sioux Falls, SD*
Personal impairment. Doctor entered into a stipulated agreement with the South Dakota Board.
Violation: 334.100.2(8) RSMo
Board Action: License issued under five (5) year probation with terms and conditions. Effective 4/29/91

■ **MARK D. KING, M.D.,** *St. Louis, MO*
Personal impairment.
Violation: 334.100.1 and 334.100.2(1)(5)(22) RSMo 1989
Board Action: Permanent medical license issued under three (3) year probation with terms and conditions. Effective 4/8/91

■ **ALFRED GILFORE, D.O.,** *Lenexa, KS*
Board Action: 4/5/91 — Reinstatement denied based on failure to submit proof that he had obtained the required number of hours of continuing medical education credits.

■ **DOUGLAS S. GORACKE, M.D.,** *Springfield, MO*
Arrested in Kansas and charged with sexual assault and attempting to possess cocaine. He pled nolo contendere. Kansas Board of Healing Arts suspended his license, then reinstated his license one (1) year later.
Violation: 334.100.2(8) RSMo
Board Action: Issued Missouri medical license under four (4) year probation with terms and conditions. Effective 4/2/91

■ **CHARLES J. LATENDRESSE, M.D.,** *Grundy Center, IA*
Pled guilty in Iowa to charges of harassment. Placed on three (3) year probation. The doctor failed to notify the Missouri Board of the Iowa action. Minnesota Board subsequently restricted his license in that he also failed to report the Iowa actions to them.
Violation: 334.100.2(8) RSMo
Board Action: Revocation of Missouri license. Effective 3/18/91

■ **JAMES B. MERCER, M.D.,** *Lenexa, KS*
Kansas Board of Healing Arts revoked license for violation of federal and state controlled drug laws.
Violation: 334.100.2(8) RSMo
Board Action: Revocation of Missouri license. Effective 3/18/91

■ **NEWTON D. NEUFELD, D.O.,** *Springfield, MO*
While licensed in Texas, the doctor wrote controlled drug prescriptions for a Missouri patient. The prescription did

not meet all of the technical requirements of Texas law nor did he have the authority to prescribe controlled drugs in Missouri. Texas issued an oral reprimand.
Violation: 334.100.2(13) RSMo
Board Action: Three (3) year probation with terms and conditions. Effective 3/11/91

■ **TATOOL ORDOUKHANIAN, M.D.,** *St. Charles, MO*
Board Action: 3/18/91 – Refused to renew medical license based on the failure to meet the requirements for continuing medical education credits. Additionally, the Board considered the fact that the doctor pled guilty to a misdemeanor charge of attempting to obtain controlled drugs by fraud.

■ **BRUCE S. PUGATCH, M.D.,** *Pleasanton, CA*
Georgia Board denied doctor a Georgia license, and he was not allowed to return to his residency program at Ohio Valley Medical Center.
Violation: 334.100.1, 334.100.2 (3) & 334.103.2 RSMo Supp. 1990
Board Action: Temporary license issued under terms that expire on June 30, 1992. Effective 4/3/91

■ **JOHN H. STANLEY, M.D.,** *Kansas City, MO*
License revoked by Missouri Board on 3/8/91. Revocation stayed by the Circuit Court of Cole County on 3/8/91. Case is now pending final disposition of Petition for Review.

■ **MARY K. STONE, M.D.,** *Blue Springs, MO*
Prepared a discharge summary which stated that a surgical procedure was performed when it was not.
Violation: 334.100 RSMo
Board Action: 5/3/91 – Reprimand

■ **A.A. ULSH, D.O.,** *Hickman Mills, MO*
3/18/91 – Renewal of license denied based on failure to meet statutory requirements for continuing medical education credits.

■ **JAMES H. WEBB, D.O.,** *Kansas City, MO*
Personal impairment.
Violation: 334.100.2 RSMo Supp. 1990
Board Action: License issued under five (5) year probation with terms and conditions. Effective 5/3/91

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References should be cited in numerical order in the text and arranged at the end of the article in the same order in which they are cited. The reference should give name of author, title of article, name of periodical, volume number, initial page number and year. Authors are responsible for reference accuracy.

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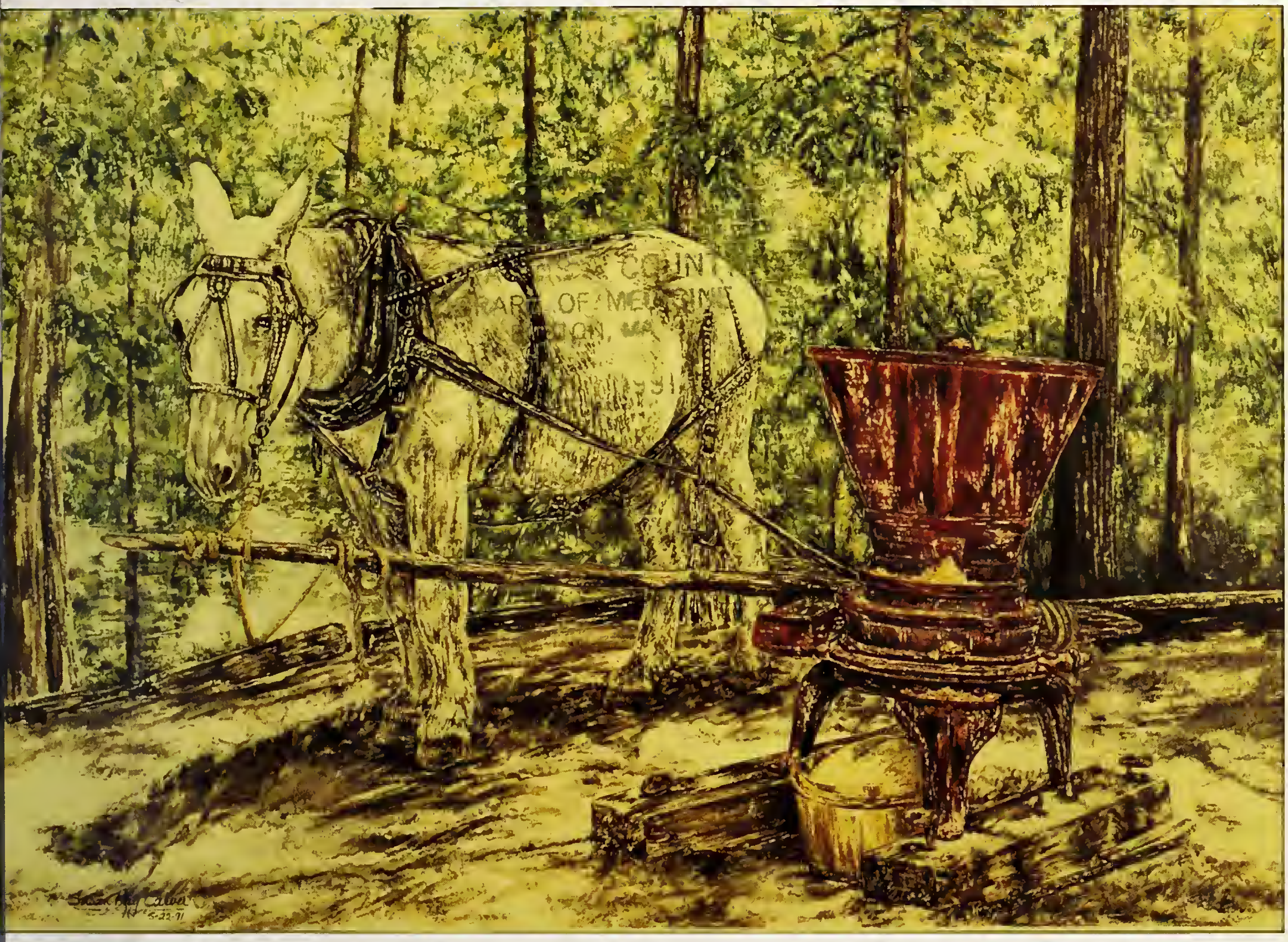

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MONETAMED PROFILE

THOMAS P. DOYLE, M.D.

HOME: Springfield, Missouri.

AGE: 36.

SPECIALTY: Orthopedic Surgery.

MEDICAL COLLEGE: University of Missouri, 1978

PRACTICE: "I recently purchased an established but declining sole practitioner office from a retiring physician. It' a risk, but they say that great deeds are usually wrought at great risk."

TYPICAL DAY: "Let the horses out of the corral at dawn and maybe even go for a ride. Then, it's surgery if scheduled and a day of torn ligaments and sprained ankles. The evening finds me on the sidelines of one of our high school sports teams."

HOBBIES: Horseback riding and golf. "If I combined activities, would it be polo?"

LAST BOOK READ: Missouri: Images of Nature, photographed by Charles Gurche.

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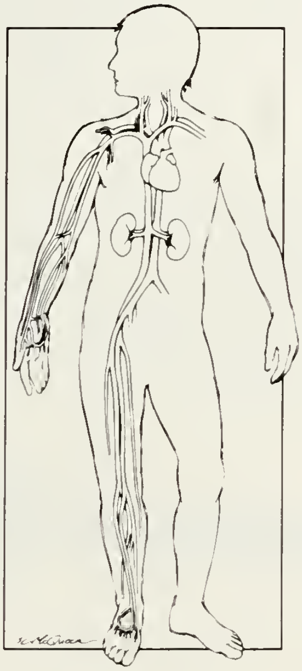

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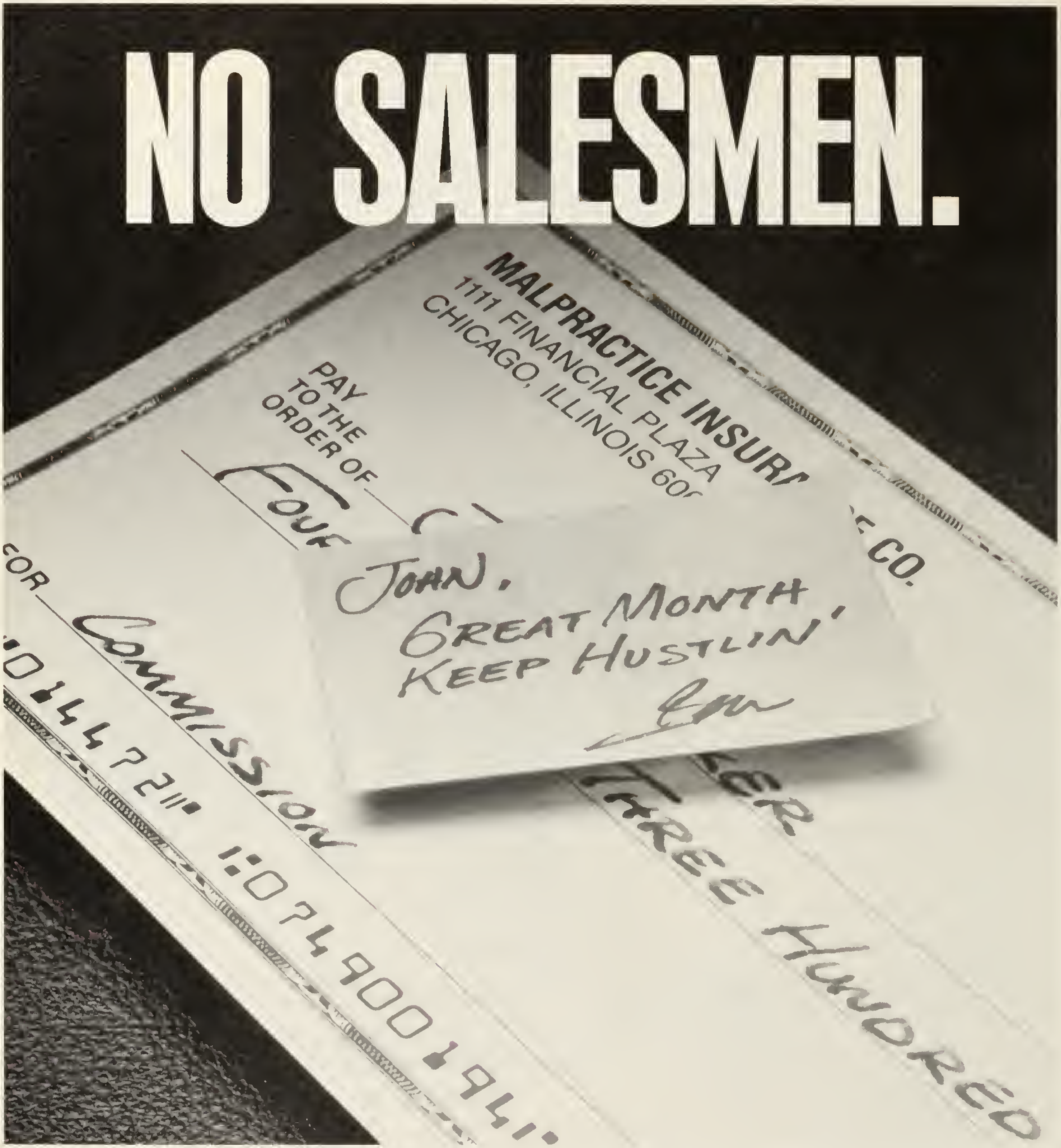
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GUEST EDITORIAL

by George M. Bohigian, M.D.
St. Louis, Missouri

Beware: Medicare Audits Can Be Hazardous To Your Health

Mark Twain said there are two things that we need to succeed: Confidence and Ignorance. Physicians and their office staff are very confident that they are billing correctly for intermediate levels of service; however, I doubt that most know what intermediate means.

Ignorance, though, is no excuse. I recently met a very fine and conscientious general surgeon who had been fined $70,000 by Medicare. He was audited by Medicare and accused of unwittingly upgrading his codes. Based on the extrapolation method used in Medicare's audit, he was fined $100,000 for his "overcharges." After appeal the fine was reduced to $70,000.

Webster's dictionary defines intermediate as "being or occurring at the middle place or degree or between extremes." Physicians and their staff often use this definition intuitively, assuming that intermediate represents the usual, average level of service. The definition of the American Medical Association's CPT Editorial Panel may surprise you. An intermediate level of service pertains to the evaluation of a new *or* existing *condition that is complicated with a new diagnostic or management problem.* This definition states that the patient must either have a new condition, i.e. a new diagnosis, or a change in an existing condition to merit an intermediate level of service charge. (The only exception to this definition is in the ophthalmological CPT coding.)

What can physicians do about this? The first step is to focus on adequate documentation in the medical record, to substantiate the level of service that is charged. Unfortunately for the physician who was fined, he did not document carefully in the medical record when there was a new condition. According to the Medicare auditor, if it is not documented, it did not happen. Many visits are, in fact, intermediate. The 1991 edition of the CPT manual, page xvi, gives many examples of intermediate services. When the level of service is intermediate, the pertinent facts — a new diagnosis, a family conference, etc. — should be recorded in the chart. If the information is not in the medical record, insurance auditors will conclude that the visit was not intermediate.

Many physicians have patients return every 3 to 6 months. If the visit turns out to be a slightly more lengthy examination, they then upgrade their charge code from limited to intermediate. This does not meet the criteria of the AMA CPT Editorial panel. One approach to use for visits that take an extended period of time is the use of modifer 22, Unusual Services. This modifier should be used very infrequently and you should always file a written report when using it, to explain to the insurance company the extra time involved. Is it worth it for the

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few dollars more in reimbursement? That is for you to decide.

On a broader scale, physicians should let their voices be heard in the debate on reforming third-party payment mechanisms. Medicare's Resource-Based Relative Value Scale (RBRVS) has attempted to address some of the problems in under-reimbursement for cognitive services. However, political pressures are bringing us a "watered-down" version of the original fee schedule, with much-reduced or even no increases in reimbursement for cognitive services, such as limited visits. Routine office and hospital visits lie at the heart of patient care, and physicians deserve to be adequately reimbursed for them.

Routine billing of intermediate visits, both office and hospital, may invite a comprehensive medical review for overuse, leading to a Medicare audit. I predict that we will see audits very similar to the IRS (you are guilty until proven innocent) become more frequent in the St. Louis area. These will be highly publicized to frighten physicians into conforming to the rules and regulations, but they also will promote downcoding legitimate intermediate visits to minimize the risk of an audit. Unfortunately, he who has the gold makes the rules. If you are not sure about your billing and reporting procedures, check into the physician support services offered by the hospitals where you are on staff. ■

Dr. Bohigian would like to acknowledge the help of Betty Struchoff, Senior Consultant, Physician Practice Support, Barnes Hospital, St. Louis, for preparation of this article.

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EDITOR'S DESK

by Donald G. Sessions, M.D.
Editor

Waking Up

We are finally airborn — the Beaver float plane carries the seven of us, our gear, three sixteen-foot canoes, and two pilots. After an interminably long taxi we are off from Lynn Lake headed north over the subarctic tundra of Manitoba. The land is flat and generously dotted with lakes. It is brown, green and blue. We set down on the northern end of Nejanilini Lake. We step off the pontoon onto a sand beach. It is hot, over 90 degrees and there is a new hatch of black flies and mosquitos. We unload the plane. Leaving the canoes and paddles on the beach, we carry our packs up the nearby esker and set up our tents at a point where we'll get the most wind. The tents are always placed to give us the best protection from the insects.

We are on a canoe expedition down the Caribou River, billed as one of North America's premier white water rivers. I am here at the invitation of my son. I have been training for about four months but am worried that on this trip I am definitely out of my league. I have canoed for more than 30 years but mostly on either the Class I or II streams of the Ozarks or the lakes of the Boundary Waters-Quettico area north of Minnesota. I am concerned that we'll be going down streams beyond my capacity. I wonder what it would be like to overturn in icy snow-melt. I am having disconcerting dreams. I have bought a brand new red life preserver.

With the exception of myself, our crew is experienced. Our leader, Bob O'Hara, is a Minneapolis school teacher who has been making and taking canoe expeditions to the arctic for more than 20 years. Many years ago, Bob caught what Farley Mowat calls arctic fever. "Arctic fever," Mowat wrote, "has no effect on the body but lives only in the mind, filling its victims with a consuming urge to wander again, and forever, through those mighty spaces where the caribou herds flow like living rivers over the roll of the tundra. It is a disease of the imagination, yet it attacks men whom you would not normally accuse of being imaginative."*

Also with us are the Schaaks, Dennis and Marti, veteran canoists fresh from taking several white water canoeing courses. Denny and Brett Alleman, father and son, have had many years of white water experience on the St. Crois River in Minnesota. My 27-year-old son, Lee, rounds out the party. After finishing college, he and a friend canoed the entire Mississippi River from Lake Itaska to the Gulf. Lately, he has been doing white water near where he lives in Albuquerque, New Mexico.

The mosquitos make a lot of noise but are not much of a problem. The black flies live up to and transcend their horrid

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reputation. Literally hundreds swarm each of us. We douse all uncovered skin with insect repellant. It slows down the mosquitos. The black flies, however, are relentless in their attack. We must put on head nets for survival, let alone comfort. When not in the canoes, we automatically look for windy spots. Drinking under our head nets is not a problem, but eating out of a bowl does present an inconvenience. It is easiest to take a few steps, lift the head net, take a spoonful, and put down the head net as we swallow. Mealtimes are a challenge. Each night after diving into our tent, we spend at least five minutes killing black flies before we can go to sleep.

The black flies bite by making a small incision. A red welt results that itches like crazy. If left alone, the welt disappears after three or four days. However, no human being could tolerate this welt without major league scratching. The black fly is ruthless in its ability to crawl into all body crevices. The first night I am shocked as I remove my shirt in the tent and see blood coming from my umbilicus. Three dead black flies have drowned or suffocated. As the days go by I am less surprised by the audacity of the flies. They are intrusive during the most private of times. When nature calls, it becomes a creative adventure of the highest order.

Whenever possible we hike the eskers, which are ridges of sand and gravel believed to have been deposited in the past by rivers flowing under the glacial ice. We see the massive tracks of a lone wolf. Everywhere there are trails made by hundreds of caribou going north and south. Dennis and Marti find the bones of two large caribou whose horns are locked together permanently. The sun goes down about 10:45 p.m., but it never gets pitch dark.

Each morning we load up the canoes. All the gear is enclosed by special covers designed by Bob. The paddlers are enclosed but can free up easily for emergencies by pulling on a velcro tape. As the member with the least experience in white water, I am often the rider in the canoe. Quickly we see how important it is to be able to "read" the rapids. Bob is a master at this and can often see a ledge at the bottom of a run that is not obvious to the rest of us. I begin to understand white water jargon. I learn about chutes and pillows and hydraulics and the bow rudder stroke.

In the arctic, the rivers do not open up until the ice melts. Then for several weeks the water is high and more easily run. This season there has been an early melt and unfortunately, the rivers are low. We must carry the canoes over the low spots. Sometimes this means just pushing and pulling the canoes over short stretches. At other times, it means a major portage over immense boulder fields.

After awhile, I get a better sense of what an arctic white water canoe expedition is all about. Each set of rapids is a new challenge, a new game. Bob is extraordinary at deciding whether a rapids can safely be run. Two major factors influence his choice each time: 1) the canoes are fully loaded and 2) we are in the arctic barrens with absolutely no chance for quick help if we have a problem. Thus Bob, as leader, is very conservative in "lining" down dangerous rapids. Lining allows the current to carry the boat down as paddlers go along the shore holding lines secured to the canoes at the bow and the stern. Most of the time, however, after the rapids have been scouted thoroughly, we go for it. This experience is outrageous as the noise from the water is deafening, the boat is often out of control, decisions on direction must be made instantaneously, routes must be changed automatically, and waves of water cascade onto the boat covers, dousing us all. There is rapid give and take communication between the bow and stern. If we have been skillful or lucky we get to the pool at the bottom unscathed with a rush you wouldn't believe. If we have not been so skillful, we then get hung up and must figure out alternative solutions to the unforeseen problem of what to do in the middle of difficult and sometimes dangerous rapids. And as soon as that one is finished, it is time to get ready for the next one. That this is done time after time and day after day with joy and enthusiasm as well as fear and trepidation, attests to the confidence we have in our leader's skill and intense concern for our safety.

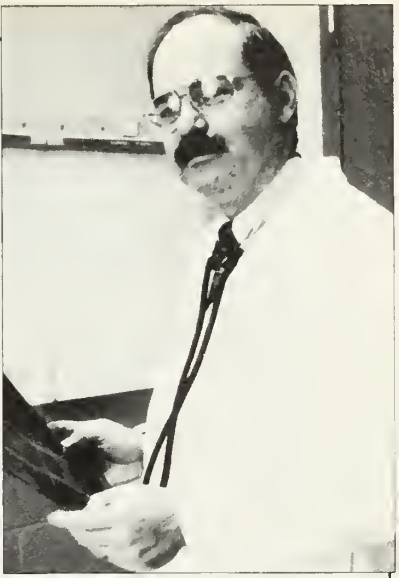
For more than 10 days, we see almost no wildlife except for birds and fish. The plovers scream at us for invading their territory. We are often too exhausted to fish. Suddenly a seal appears and adopts us. It has swum upstream from Hudson Bay in search of food. For almost two days, the seal watches us observe him. I am amazed one afternoon as I sit beside a large rapids to see "our" seal going down the chute sideways with three-quarters of his body out of the water, checking me out.

We run out of rapids and approach the Bay. It is getting late in the day. There are no ridges on which to camp, only small outcroppings of rock and alder. We find some small islands of sand no more than a foot above the water level. We all agree that it is time to stop for the night. We set up our tents and as we cook dinner, it begins to rain lightly. We finish dinner and get into our sleeping bags for the night. The rain increases as does the wind. Because of the sand and our short tent stakes, the weight of our bodies and our packs is about all that keeps the tents in place. We hear thunder and see lightning to the east of us over the bay. We count the time in seconds between the lightning flash and the following thunder — over 30 seconds. The torrential downpour and the wind worsen. There is now a little water in the bottom of the tent. I have visions of the water level rising as it would on an Ozark stream. The lightning and thunder are now simultaneous. I bundle onto my sleeping pad to make sure no part of me is touching the ground. Strangely my thoughts are more about how inconvenient it would be to pack all our gear up and get into the canoes. Just when we think the tent will flatten with the wind and the rain, it stops. We are so excited it is difficult to get to sleep.

We near the end of the river. In view of the Bay we observe a fascinating phenomenon — over a six hour period, we see a 12-foot tidal change. A field of sand and enormous boulders becomes covered with water almost as we watch. This allows us to get over to our pick-up point at the mouth of the river. The next day the boat arrives on time, which according to some experts is miraculous. This morning Hudson Bay appears to be glass. Nearby we can see the ice pack. Our boat circles a massive polar bear that has left the melting ice pack and is swimming to shore for the summer. It is infuriated and snorts at us. As we get closer to Churchill, our final destination, we see many Beluga whales as they surface.

As I go through my everyday life handling family and patients and co-workers, just doing what I do, I get into a groove. I constantly look for ways to do things more easily and increase my comfort level in all domains. When I am able to achieve this I notice that my aliveness suffers and my vitality freezes in time. At times like this I have the opportunity to create situations that can transform the very way I see my life. This arctic expedition, for instance, was like a wake-up call. During and after the trip I saw persons and events with a new and expanded clarity. Somehow survival activity changed my ability not only to observe my life but also to take action in unprecedented ways. For some time I had given up on the possibility of doing certain things in my life. This trip helped me to see that many of the domains I had given up on, were still open to me. For me, there is nothing like the experience of waking up and seeing what's going on out there and recognizing that I can still be a part of it. ■

*Mowat, Farley. *People of the Deer.* Pyramid Books, New York, 1951, p 15.



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PRESIDENT'S PAGE

by Dorothy D. Reister, M.D.
MSMA President

Physicians can help others in settings outside the office or hospital, but we have to take the initiative and make the time to do so. It is time for us to rearrange our priorities.

What Have You Done Lately — And For Whom?

Have you done something recently *just* for yourself? Perhaps you took a leisurely walk in an area you hadn't explored recently. Maybe you ventured into a shop you had wanted to see but never before had taken the time. Possibly, you went into the Chocolate Shoppe and treated yourself to something sinfully delicious. Or maybe you sat down to read a book for pure pleasure. Surely you can think of lots of other things you could and would want to do just for you. After all, we all deserve such time.

Have you done something recently for your family? Perhaps you took them somewhere they had always wanted to go, although you really didn't care to make the trip. You may have rearranged your schedule so you could make it to a ballgame or school program for your children. Could you have given a single rose to your spouse unexpectedly? Perhaps you took your family on an historic outing without time pressures and without a strict schedule to follow. Maybe you let the rest of the family make all the plans and then you made the necessary arrangements for an event. Again, you can think of all sorts of things to do, and just think how pleased your family will be. After all, they deserve it.

Have you done something recently for the associates in your practice, both physician and nonphysician? Maybe you knew that a fellow physician needed a bit of extra time for some reason and you offered to cover for him without time or money recompense. Perhaps you arranged a luncheon for everyone that celebrated nothing in particular, but said, "Thank you," for a lot of things. Bringing to the office some especially nice fruit for everyone, again for no specific reason and not at holiday time, might have been on your agenda. You may have even remembered to pay a sincere compliment to someone in the office. After all, these are greatly appreciated.

Have you done something for our profession recently? It is apparent that many of us wrote our Congressmen, Secretary Louis Sullivan and HCFA head, Gail Wilensky because the proposed 16% reduction in Medicare payments has been taken back for reworking. There were thousands of letters from us. The entire Missouri delegation, House and Senate, wrote letters supporting our views. Don't forget to thank them. Have you brought several new members into your component society, Missouri State Medical Association or the American Medical Association? (Please let me know the specifics.) Perhaps you have been in contact with your legislator for whom you are the Key Contact. That contact is easier when he is home between sessions and it may be social, professional or political. If you are not a Key Contact, maybe you will become one and if your legislator already has one, another is always helpful. Have you been involved with hospital and medical committee meetings? Many of you have been. Perhaps you have

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President's Page

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been to specialty society meetings and voiced support for membership in the Missouri State Medical Association as well; it increases the effectiveness of both organizations. Do you know what percent of your specialty members also belong to Missouri and American Medical Associations? If you don't know, maybe you will find out and correct deficiencies. We have an Interspecialty Medicine Commission in our state association and they should be spreading the same word about joint membership. After all, our influence is greater if the base (membership) is broader and we need all the help we can get.

Have you done something recently to better your church, schools, city, county or youth organizations? Have you volunteered at a free clinic or have you been watch-dogging your school board and the future of your children's education? Perhaps you have been involved in local proposals and ordinances to be sure that we, as patient advocates and good citizens, present the entire picture. Maybe you have spoken to students, parents, and teachers about alcohol, tobacco and drug abuse. The last mentioned includes the anabolic steroids that are a Schedule III controlled substance. Dispensing of those illegal steroids is a Class C felony and is covered in Federal and State laws. You may have helped at Scout or Campfire camps, even filled in as the on-site health care professional. Perhaps you have helped programs for the Explorer Scouts or helped at special camps for special need children. Were you involved in fundraising for a worthy cause in which you believe? After all, there are some needs best met by our profession and it is personally rewarding.

And have you done anything for our country? We know we had a number of physicians who served in Desert Storm and we're glad they are back. But part of our responsibility to our nation is to vote and to offer our suggestions and support when we can; it is also a responsibility to respond effectively to those proposals that are not in our patients' best interest. Physicians are the advocates for their patients and with them we can form a more powerful force. Perhaps you talked to patients about some of the upcoming political, health care and insurance issues and enlisted their aid and support. After all, we need them and they need us — all the way from the physician's office to the halls of Congress.

Please take a minute to look back at your summer and see where the time went and what you have to show for it. Is there a happier you? Are there happier family members, associates? Are there better informed legislators, students, parents, teachers and patients? It is not the money or recognition that warms us — it is the feeling of being appreciated, respected, and in some instances, loved. With the advent of fall, we have football, soccer, drama and, of course, meetings. Can you rearrange your priorities in such a way that time is available for some of the things I've mentioned?

As physicians we have responsibilities above and beyond our practices. No one can do some of these things as well as we can, but we **must** take the time and effort to act to better self, family, practice, profession, schools, locale, and government.

What have you done lately? ■

Answers to September's puzzles:

What is the oldest outdoor sport?

Archery is more than 2,000 years old as a competitive sport.

What are eight countries named for people?

USA for Americo Vespucci
Saudi Arabia for King Saud
Colombia for Christopher Columbus
Bolivia for Simon Bolivar
Solomon Islands for Solomon (obviously)
Phillipines for King Phillip
El Salvador for Christ
China for Chin Dynasty, originally spelled Qin, pronounced Chihn.

AUXILIARY MESSAGE

by Sherry S. Strebel
1991-92 AMA Auxiliary
President

Make A Difference

It is a pleasure to greet you through this medium — to have the opportunity to share with the physicians of Missouri the message I am bringing to auxilians across the nation this year. That message is, "That each of us has the opportunity to make a difference if we are committed to a cause and if we're willing to risk our involvement for that cause. And when people with like minds work together, they can do more than make a difference — they can change the world."

I am asking auxilians to make a difference in their communities this year with their efforts on behalf of fundraising for the American Medical Association Education and Research Foundation, in promoting sound health legislation, and in providing outstanding health programs in their communities.

A special program in which we hope to make a difference is an issue with which physicians are concerned — and that is family violence. The AMA has called on the auxiliary to take the lead in addressing this issue because it is has become a health concern of epidemic proportions. As I have urged our members, I urge all in the medical community to become involved in a three-point program to address this problem — in education to make people aware of family violence and its consequences; in support for victims; and in providing resources to physicians to share with their patients who are victims.

Last year, we began a campaign to enhance the image of the medical profession through promoting media coverage of the volunteer efforts of physicians and spouses. This year we are continuing that campaign and calling on those relationships we built with the media — newspapers, radio, and television — to gain recognition for the wonderful health projects and programs auxiliaries are providing to the community.

Of course, we could not make a difference on any of these issues without the support we receive from the physicians of this nation. We thank you for that support, and we hope it will continue. For it will enable us to continue to do what we as auxilians do best — make the difference for our families, for our communities, for our nation, and for the world. ■

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PRACTICE MANAGEMENT

by Janice K. Woerth, Ph.D.

Do you have a question for Dr. Woerth? Include your questions along with your name, address and phone number and send them to:

Janice K. Woerth, Ph.D.
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Although your name will **not** *be used in the journal, please include your name and phone number so that Dr. Woerth may contact you if she needs additional information to answer your question.*

Dear Dr. Woerth:

I understand that CPT codes for office visits are being changed. When will this happen and where can I get the new definitions of these codes?

Dr. O.J.

Dear Dr. O.J.:

The CPT Editorial Committee is indeed revising the definition of medical office visits as well as medical home services, nursing and rest home services, emergency department services and preventive medicine services. These code revisions will be included in the 1992 CPT book that will be available in January, 1992. While there are still five levels of medical office visits for new patients, for established patients the levels of visits have been reduced from six to five. Each of the office visits includes a description of the severity of the medical problem (e.g., minimal, minor, low to moderate, and moderate to high severity), the level of decisionmaking [sic] (e.g., straightforward, low complexity, moderately complex, and highly complex), and a time factor ranging from 5 to 60 minutes. The definitions of a new and established patient have also been revised. As presented in the June 5, 1991 *Federal Register* a new patient is one "who has not received any professional services from the physician for any problem within the past 3 years." An established patient is defined as one "who has received professional services from the physician for any problem within the last 3 years."

Dear Dr. Woerth:

The physician I work for spends a great deal of time on the telephone with patients and calling in prescriptions. I think some patients take advantage of his generous nature and use the telephone instead of coming to the office. Patients know that they will not be charged for a telephone call and will be charged for an office visit. Is there any way that we can charge for telephone calls and, if it is possible, will insurance pay for the call?

K.C.

Dear K.C.:

There are CPT codes for telephone calls and it is perfectly appropriate for a physician to charge for time spent with or for patients on the telephone. The codes for telephone calls are 98920, a simple or brief call, 98921, an intermediate call, and 98922, a complex or lengthy call. Note that these calls must be made by the physician. They can be a call to a patient, to another physician for consultation, to another health professional or family member for medical management or to other health care professionals, including nurses, pharmacists, social worker, etc., for coordinating medical management. All these calls can be billed to the patient.

Some insurance companies do pay for telephone calls. Medicare, however, rarely pays for calls. I have known instances where Medicare has paid for a call by a physician to a patient on anticoagulants. However, regardless of whether insurance pays for the call or not, the physician has still spent time with or for the patient and is entitled to be reimbursed for this time. Although many physicians have not traditionally charged for telephone calls, I think that with the trend set by insurance companies, HMOs, PPOs, etc., to discount the cost of services to patients, physicians will be forced to charge for what once were free services in order to make ends meet. ■

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SPECIAL ARTICLE

Why Nursing Home Insurance?

Wilfred E. Wooldridge, M.D.
Springfield, Missouri

I would wager that 75% of the population know nothing about long-term insurance in nursing homes. I would also wager that 50% of physicians know little about it and not 10% know its expense.

This situation is understandable only because nursing home insurance is a newcomer to the medical insurance arena. The first insurer entered the field in 1974. By 1985 20 companies offered coverage and there are now more than 100. Without exception, any industry expanding so rapidly must be evaluated with caution because there will be weeds among the flowers. Never was caution better advised than in this field because costs and benefits vary tremendously between companies. In 1986, it was for this reason that Wisconsin allowed only a single insurer to operate,[1] fearing that the complexities of coverage mixed with the difficulty and confusion of interpretation among the elderly would be overwhelming if the field was left open.

How real is the risk of a person's need for nursing home care? The sobering figure is 43.1% for those aged 65-69. That figure rises to 47.6% for those between 80 and 84.[2] For women of all ages, the number is double that of men.[3] Among total patients there are a surprising additional 5% of patients, ages 18 to 54 and 55 to 65, who need nursing home care. These latter groups are mostly impaired physically or mentally due to serious accidents or inherited disorders and fall outside geriatric statistics. Nevertheless, such figures are chilly reminders that nursing home care is not only something for others, but also an unpleasant possibility for anyone.

If you are not yet convinced, consider the following grim figures: Twelve percent of the population was over age 65 in 1986, and that figure is predicted to rise to 20% by the year 2030. More ominous, the over-85 group will have more than doubled by that time, and this group most requires custodial care. Extrapolated, these figures mean that the elderly requiring various levels of long-term care will triple in the half-century beyond 1986. Expressed in 1980 dollars, nursing home outlay throughout the country grew 10 times between 1965 and 1980 and the U.S. Department of Health and Human Services has estimated those expenses will quadruple again by 1990.[4]

What all this means is that today there is a very great, uncovered outlay of medical expense. In 1985, James Weil, a vice-president of the Metropolitan Life Insurance Company said, "Nursing home care is the last great uninsured risk of the elderly."[5] Sensing this, I wrote in 1979, "The advances of medicine during the last generation have accomplished much to prolong life but little to postpone senescence."

Here exists the potential of tragedy. Eighty percent of members of the American Association of Retired Persons (AARP) surveyed by the Gallup polling organization, believed that Medicare covered most or all of their long-term health expenses. More than 50% of the remainder believed that Medicare Supplementary Insurance (Medigap) would cover any shortfall.[4] Nothing could be more wrong! Little, if any, expense for custodial care is covered by either Medicare or Medigap. In 1986 the sources of payment for nursing home care included 50% from the person and family, 43.1% from Medicaid, 0.8% from private insurance and a miniscule amount from other sources, including Medicare.[6] In spite of the fact that there has been some momentum in the private sector since that time, there is only early indication of change in those figures as the concept of nursing home insurance begins to be felt. Today, *the greatest cause of impoverishment of elderly families is still the necessity of nursing home care.* On average, only 13 weeks elapse from the time a patient is admitted to a nursing home until the spouse's resources are exhausted to the point of falling under Medicaid.[7] With the years of relative prosperity since the end of WWII, the ability of people to care for themselves should have peaked, but these are today's hard demographics.

Various proposals to make long-term nursing care available exist. These include:

1. Create a Medicare "C" whereby everyone would pay a mandatory coverage premium that would include long-term care of various sorts.[1]
2. Institute an actuarily designed program with contribution of every working individual of about 1% of his/her income beginning at age 35. This income would be specifically set aside to pre-fund expected lifetime long-term nursing home care.[2]
3. Urge individuals to insure themselves by private participation years before long-term care is anticipated when premiums would be much diminished at an earlier age.[2]

Unfortunately, none of these plans answer current problems. Creation of a Medicare "C" would add substantially to already escalating Medicare expense at a time when there is emphasis to shift that expense to the private sector and the mood of the electorate is unsupportive of increased Medicare cost. The second choice would likely meet great resistance and require considerable time to generate effective funding. The voluntary third choice would likely be ineffective due to lack of desire or ability to set aside sufficient funds at a time of life when nursing home care has little priority in young minds.

This leaves us with present, private insurance for long-term coverage. That expense is great enough so as to be practical for only the higher middle-class and the wealthy. Before that expense is assumed it should be balanced against two factors:

1. The average annual cost of a year's stay in a nursing home in 1988 was about $22,000 but rose as high as $45,000 in some metropolitan areas.[7]
2. In 1980, the average length of stay of a patient was 456 days.[6]

For most families, this is a dangerous level of expense, especially when added to the separate maintenance of a residence or apartment for the spouse. Neither is the expense of nursing home long-term insurance inconsequential. For my own information, for the age 65 age level, I chose six policies of reputable companies, with provisions as equal as possible, and the average annual premium was $546.12. Premiums rose sharply with age so that one of those companies quoted a combined annual premium for a 68-year-old wife and a 72-year-old husband of $2,336.40.

I list, alphabetically, eight of the best companies writing these policies: Aetna, Amex (American Express), Bankers Life and Casualty, John Hancock, Physicians Mutual, Provident, Prudential and Travelers. There are many other companies listed in the May, 1988 issue of Consumer's Report.[8] Almost all companies require certification by the patient's physician that no hazardous disease exists at the time of application that would imminently require nursing home care. The percentage of refusal of companies to extend coverage varies widely. Since features of policies vary widely, as do premiums, one must be aware of desirable inclusions.

In summary, there is no question that nursing home insurance is desirable, and that a policy must be affordable and carefully evaluated. In the immediate future there appears to be no way to achieve this care other than by private purchase, unless an individual has such limited resources as to fall into the Medicaid category.

When a person evaluates any policy, the waiting period should be considered, and the daily benefit should be enough to cover a substantial portion of the expense. The policy should cover skilled, intermediate and custodial care. The coverage period should be at least four years which will include 95% of admissions. Preferably, admission to the nursing home should be possible without the necessity of hospitalization and, if it is possible for a patient to return home, some home care should be provided and that period at home should not compromise coverage if re-entry to the nursing home becomes necessary.

The best policies have waiver of premium after a period of confinement and also are guaranteed renewable for life with a fixed premium. Recently, better policies have built-in annual increases in daily allowances, usually 5%, to adjust for inflation and this is included in the original premium.

An important feature of coverage is that a policy should specifically cover Alzheimer's disease and dementia. There is much elasticity in "dementia" in the insurance industry, and it is sometimes circumvented by the term "organic nervous and mental disease," which leaves an immense loophole. Last, one should consider only policies offered by companies with Best's A or A plus ratings.

It is only when the above qualifications are met that one can be sure that a policy provides adequate coverage.

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■

Editor's Note: Dr. Wooldridge is a former editor of Missouri Medicine and a freqent contributor to the journal.

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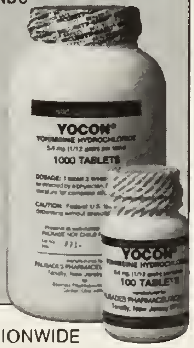

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Plum Pit Ileus: A Case Report

Marc C. Johnson, M.D., and **James K. Fisher, M.D.**
Kansas City, Missouri

The authors discuss the unique situation of a plum pit mimicking a gallstone ileus.

Gallstone ileus is a disease process in which at least one gallstone erodes through the gallbladder wall into the adjacent bowel. This creates an internal fistula, giving rise to biliary air while the gallstone may proceed down the bowel, causing an obstruction by lodging in the bowel lumen. Recently, we encountered a case of an ingested plum pit that produced signs and symptoms similar to a gallstone ileus. Fruit pit or plum pit impaction should be included in the differential diagnosis of gallstone ileus.

Case Report

A 71-year-old, previously healthy woman was admitted to the hospital with severe intermittent lower abdominal pain, associated with nausea. Physical examination demonstrated a tender abdomen with no rebound. Bowel sounds were high-pitched throughout the abdomen. Serum laboratory studies were normal. A supine abdominal film demonstrated scattered and moderately distended small bowel loops, as well as non-dilated gas within the colon consistent with a small bowel obstruction (Fig 1). No calcific radiopacity was seen. No biliary gas was identified. Because of the patient's persistent and worsening abdominal pain, an abdominal CT scan was performed. Computed tomography demonstrated a partial small bowel obstruction with a 1 cm rounded calcification in a small bowel segment in the right lower quadrant (Fig 2). Based on these findings, the patient was taken to surgery. Ten centimeters from the ileocecal valve, a 2 cm area of ulceration with associated perforation and serositis was found, with a plum pit embedded within the ulcer. An ileocolectomy was performed.

Discussion

Gallstone ileus, a complication of cholecystitis, refers to the mechanical intestinal obstruction by a gallstone that has entered the bowel via a fistula through the gallbladder wall. The duodenum is the most common site of fistula formation, followed by the hepatic flexure of the colon, stomach, jejunum, abdominal wall, and renal pelvis.[1] The site of obstruction in 60% of cases is the ileocecal valve, followed by the proximal ileum in 25% of cases and in the distal jejunum in less than 10% of cases. Rarely, the stone obstructs the duodenum, producing gastric outlet obstruction (Bouveret's syndrome).

The classic finding on the plain abdominal radiograph (KUB) were first described in 1941 by Rigler.[2] The triad he described included hoop-

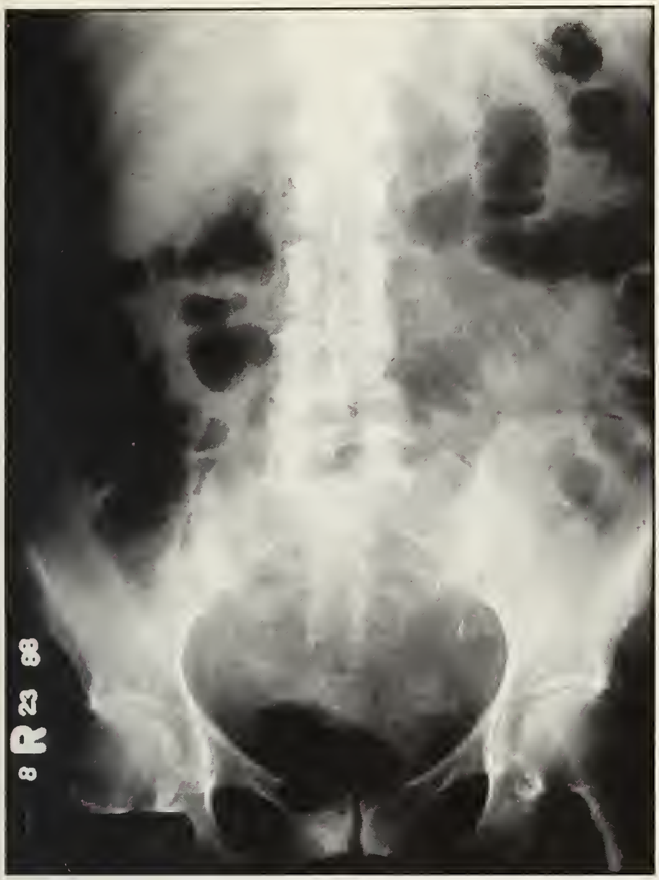

Fig. 1. Radiograph of the abdomen demonstrates an early small bowel obstruction. No biliary air or calcification is present.

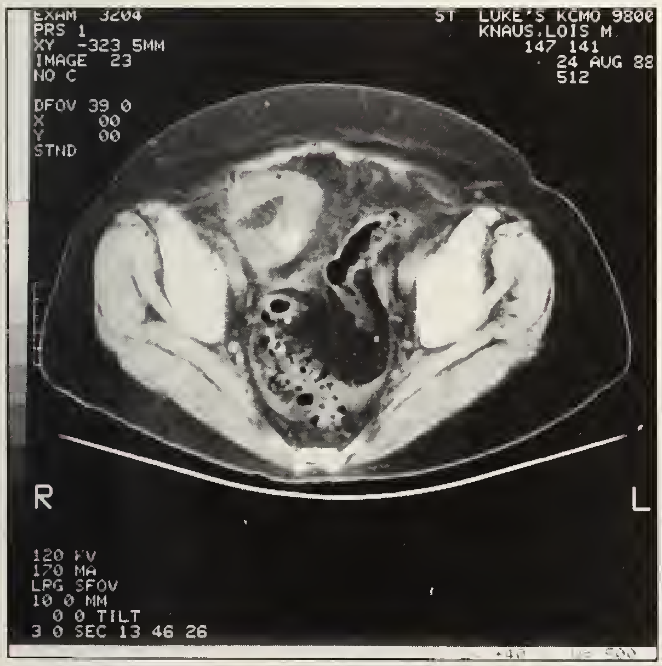
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Fig. 2. Computed tomography demonstrates a calcified radiopacity within a bowel loop in the pelvis. Evidence of an early small bowel obstruction was present.

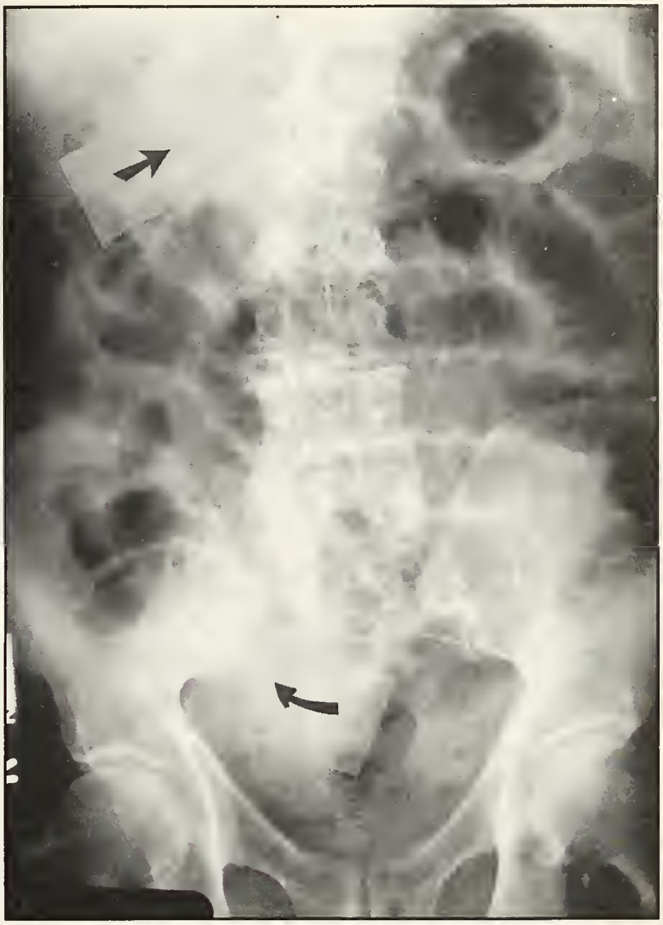

Fig. 3. Radiograph of the abdomen demonstrating a small bowel obstruction and biliary air, two of the three classic findings described by Rigler.

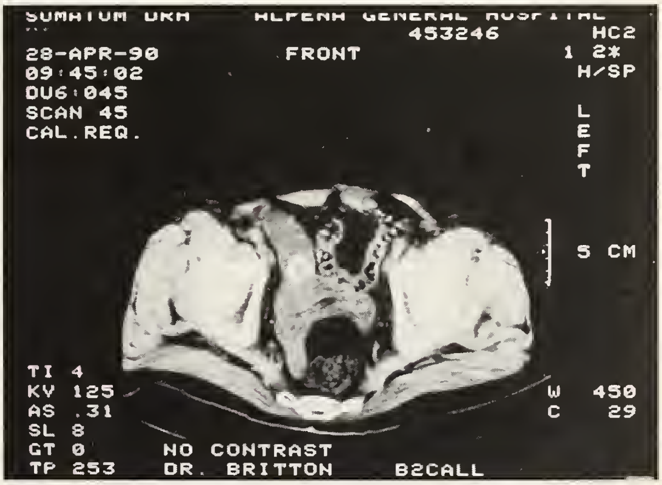
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Fig. 4. Computed tomography of a case of documented gallstone impaction at the ileocecal valve, with accompanying small bowel obstruction.

shaped, dilated loops of small bowel, air in the biliary tree, and a calcified gallstone in an ectopic abdominal location. The presence of all three findings in the same patient is unusual.[3,4] Eighty-eight percent of patients with gallstone ileus are elderly women.

Small bowel obstruction may be intermittent or chronic. When obstruction is intermittent, the bowel gas pattern on a single abdominal radiograph may be normal. Since small bowel obstruction is part of "gallstone ileus," the term "ileus" is a misnomer. An actual mechanical obstruction occurs when the stone size reaches 2.5 cm, the diameter considered too large to pass through the GI tract. The majority of gallstones, however, are smaller than this critical diameter and will never cause obstruction.

Two-thirds of patients demonstrate pneumobilia, as is seen in a different patient with classic gallstone ileus and an internal fistula (Fig 3). Pneumobilia may also be caused by an incompetent sphincter of Oddi in elderly patients, or may follow the passage of a gallstone. Postoperative causes, including a sphincterotomy, cholecystoenterostomy, or a choledochoenterostomy must be considered. A spontaneous biliary fistula may also be considered. A spontaneous biliary fistula may also be caused by trauma, malignancy, or perforation of a duodenal ulcer into the common bile duct. Occasionally, a gas-forming organism may produce gas in ascending cholangitis.

The third finding, that of a gallstone in an ectopic location, is identified in one-quarter to one-half of patients with a gallstone ileus. Most gallstones are not sufficently calcified to be identified on an abdominal film. Since CT is sensitive to calcification, more stones may be identified by CT scan than by plain film,[5] as in the case of appendicoliths. The plum pit in our case was not identified on plain films, but by CT, and it was impossible to differentiate it from a gallstone preoperatively. The calcified structure we found on the CT scan appeared quite similar to the gallstones in other reported cases (Fig 4).[5,6]

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Adolescent Involvement in Kansas City Gangs

Daniel T. Earl, D.O., and **Katherine W. Smith, M.D.**
Kansas City, Missouri

The authors present information to enlighten physicians on the subject of adolescent gang involvement. Discussion includes explanations of who gets involved in these gangs, why they get involved and why it is important to identify youths who may be involved with gangs.

It is difficult to determine exactly how many adolescents are involved with gangs, as no accurate census has ever been taken. In Los Angeles, which has an organized police unit within the police department that deals exclusively with gangs, 90,000 persons are considered to be gang-affiliated, most of them under the age of 21.[1] There are no such estimates available for the number of gangs in Kansas City. However, in the Kansas City area over the past several years, there has been a marked increase in gang-associated graffiti, and in the number of adolescents who claim gang affiliation.

We will discuss briefly the origins of the major gangs, who gets involved in gangs and why, and the importance of identifying youths who may be involved with gangs.

Who Are They and Where Do These Gangs Come From?

The problem of adolescent involvement in gangs is not new, with reports of bands of youths roaming New York City as early as the mid-1800s.[2] The current gang problem in Kansas City has its roots in Los Angeles, Calif., in the late 1970s, when the two major groups were the "Crips" and the "Bloods." They mostly comprised black adolescents and young adults, and were involved heavily in drug trafficking. Police crackdowns and competition for the drug market in Los Angeles have been partly responsible for the development of gangs in a number of cities across the United States, including Kansas City. The metropolitan Kansas City area has seen a significant rise in gang-related graffiti, known as the "newspaper of the street," due to its use in announcing and relating gang activities. Evidence of the presence of Bloods has been noted in Kansas City for several years, but in the last two years, there has been a marked increase in the visibility of graffiti specific to these groups.

There are also a number of "home-grown" gangs in Kansas City, representing a variety of ethnic mixtures, including predominantly Hispanic gangs such as the Latin Kings and Latin Counts.

Who Gets Involved in Gangs and Why?

If you were to ask someone 20 years ago what a gangster looked like, you would probably get a description of a person dressed like the "godfather" or perhaps a tire iron-wielding, leather jacket-wearing thug. In our experience working with "gang-bangers" (as they like to call themselves), we have found surprising diversity in

Fig. 1. This is an example of graffiti containing much symbolism. The large letters "SD" in the center stand for "Spanish Disciples." The upside-down crown is an insult to the Latin Kings, whose symbol is a crown with 5 points. This was painted on the back wall of a convenience store in Kansas City, KS.

their ethnic and social backgrounds. While gang activity seems to be concentrated in lower socioeconomic areas, there is evidence of gang activity in all the counties around Kansas City, including affluent Johnson County, Kan. While gangs are typically thought of as a problem of black and Hispanic youth, "fully one-fifth of the adolescent boys in American communities of 10,000 or more belong to groups organized around activities that include drinking, drug abuse, community disorder, vandalism, petty theft and felony,"[3] which essentially defines gang activity.

We have noted several factors associated with gang activity:

1. **Presence of a dysfunctional familiy.** The vast majority of gang-involved adolescents we have seen come from families with significant dysfunction, including substance abuse by parent(s) and, quite often, serious physical abuse.

2. **Inability to relate with peers.** Several authors (Greydanus,[4] Hirschhi) have proposed the theory that one of the reasons adolescents get involved with gangs is that "they lack the social ability to relate to others," that the gang is composed of "social outcasts who have failed to acquire adequate bonds with others."[4] This was confirmed by Hartup[5] who noted that "delinquency and gang membership could be predicted mainly from one dimension of early peer relationships — not getting along with others." Indeed, a number of gang members with whom we have worked were initially outgoing and sociable. After an extended time, almost all exhibited difficulty in peer relations and became confrontational.

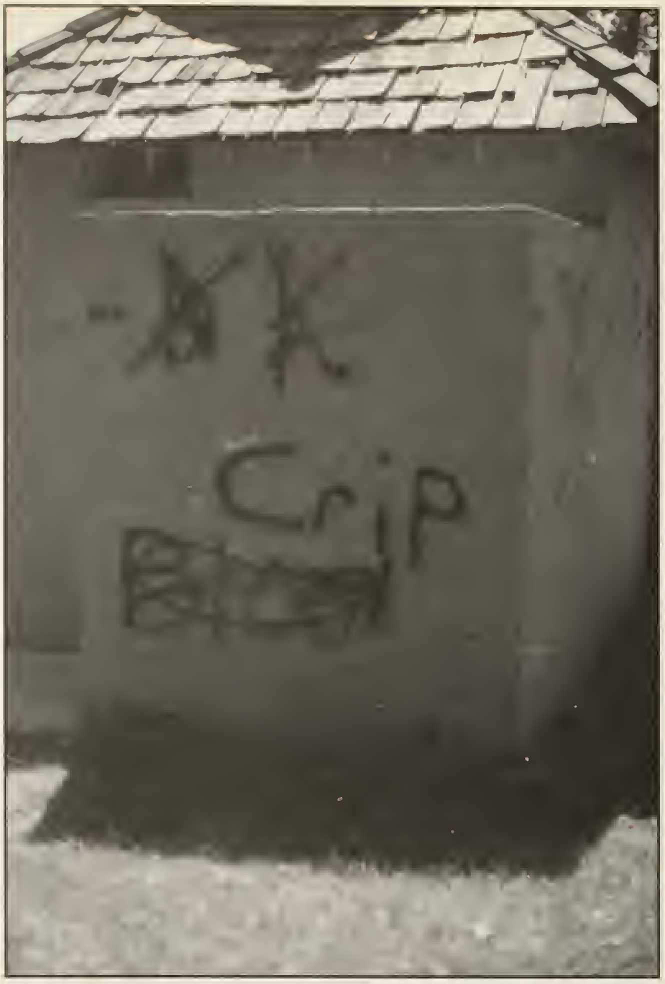

Fig. 2. An example of black gang graffiti, the name "Blood" is crossed out and a "Crips" is over it, an effort to insult the Bloods. This was painted on the wall of a public bathroom in Swope Park in Kansas City, MO.

There are several kinds of gangs in Kansas City, each based on a prototype. Each of the Kansas City gangs has its own characteristics, the model for each originating in the Los Angeles area. The major gangs in Kansas City are:

1. The black gangs, for example, the "BGDs" or Black Gangster Disciples. Their models are the Bloods and the Crips from Los Angeles. The BGDs are mainly composed of black youth who have accruing money as their primary motive. They are typically involved in drug-trafficking (mostly rock or "crack" cocaine), and have less loyalty to "turf" or neighborhood boundaries. Violence typically is a by-product of their drug trade. Hand signals and a dress code identify the different gangs. The Bloods wear red and black, the Crips and the BCDs wear mostly blue. Los Angeles Raiders base-

ball hats are commonly worn by Crips as part of the uniform. Atheletic shoes are standard footwear, and there are particular styles of shoes that gang members choose as part of their dress. Nike and British Knights are the most common brands.

2. Hispanic gangs, for example, the Latin Counts or Malditos. Their prototype is the Latin Kings from Chicago. They are comprised mostly of Hispanic youth, and have as their raison d'etre a strong sense of machismo and territorial allegience. While there is some drug-trafficking, the motivation of the Hispanic gang is ethnic pride and machismo. Violence typically is due to turf disputes and revenge.

There are other gangs as well, but they are not as widespread or influential.

Graffiti

Graffiti is the newspaper of the street. Gangs spray-paint their identifying logo on walls, buildings, dumpsters, cars, or whatever is in their area. Examples of Kansas City gang graffiti are shown in Figures 1 and 2. They will often list their membership by "street names," and announce their activities. Graffiti marks turf boundaries, and graffiti can serve as a predictor for potential violence. Gangs will often demarcate their turf by spray-painting graffiti on buildings in their particular areas, and maps can be constructed of a gang's territory. Gangs will often precede expansion into another gang's turf by defacing the rival gang's graffiti. Defacing is done by spray-painting over another gang's graffiti, or writing the other gang's insignia upside down. Territorial disputes may be evidenced by such graffiti "battles," with buildings resprayed nightly. This may evolve into physical violence, and thus noticing the transformations in graffiti may help identify the movements of gangs in a metropolitan area.

Clinical Relevance

For clinicians, it is important to be aware of gangs for several reasons. First, the involvement of adolescents in gang activity in larger metropolitan areas is significant, particularly if those adolescents come from a dysfunctional family, or have other risk factors. Second, involvement with gangs is a harbinger of other behavior that may jeopardize the health of the youth, including drug use and exposure to violence. Indentifing those adolescents at risk or understanding the factors behind gang activity may help those involved in the care of these youth to provide anticipatory guidance.

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Audiology in Medicine

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Among the most common complaints a physician confronts are those concerned with hearing loss and dizziness. It is essential that all practitioners acquaint themselves with the diagnostic information provided by an audiological evaluation. The authors describe the frequently used tests and present case studies to illustrate the value and scope of diagnostic audiology.

As we progress into the 1990s, it is unfortunate that many lay persons and professionals alike still view audiometry as "just a hearing test." Over the years, this non-invasive and economical diagnostic process has become a sensitive group of measures that the physician can rely on. Today, the audiologist can be consulted to help explain a patient's complaints of hearing loss or dizziness.

Traditional audiology was little more than an electronic tuning fork test that differentiated conductive from sensorineural hearing loss. While that measure is still with us, many refinements and innovations have greatly enhanced our ability to determine the site of lesion. Both physician and patient are rewarded with improved confidence in diagnosis and treatment.

We review the commonly used diagnostic procedures and present case studies that illustrate the scope of diagnostic audiology.

Methods

Pure Tone Audiometry

The determination of pure tone threshold is the backbone of audiology. Measurement of threshold by air conduction reveals how well a patient hears tones of various frequencies. When pure tone air conduction data are compared with pure tone bone conduction test results, one can assign a general locus to the hearing loss.

If there is decreased hearing by air conduction and normal hearing by bone conduction, the loss lies within the outer or middle ear, that is, a conductive hearing loss. Should hearing by bone conduction be as poor as that for air conduction, there is involvement of the cochlea or auditory nerve, that is, a sensorineural hearing loss. When both conductive and sensorineural components are present, the hearing loss is referred to as mixed.

An audiogram is the graphic representation of pure tone data. Frequency is plotted across the abscissa, and intensity, or degree of hearing loss, is along the ordinate.

Tympanometry

Tympanometry measures the mobility of the middle ear in response to pressure changes in the external auditory canal. Data plotted on a tympanogram are expressed in terms of air pressure on the abscissa and compliance on the ordinate. There are three basic configurations: Type A, B, and C.[1] The type A pattern is seen with normal subjects. The presence of a peak shows that the conductive system is compliant, while an apex near 0 mmHg (ambient) pressure gives evidence of normal Eustachian tube patency. The type B pattern is found in the presence of middle ear fluid. Here the conductive system is not compliant, and graphically, does not achieve a peak. The type C pattern shows normal mobility with a peak, but because of Eustachian tube dysfunction, there is reduced pressure in the middle ear, resulting in a graph peak in the negative range (beyond -150 mmHG). The eardrum is retracted, but fluid is typically not present.[2]

Acoustic (Stapedius) Reflex

In normal persons, stimulation of one ear with a loud sound causes a reflex contraction of the stapedius muscle in both ears. The reflex is thought to help protect the cochlea from noise damage by stiffening the entire conductive system.

The normal threshold of the reflex ranges from 70 to 90 decibels (dB). Patients with cochlear damage have thresholds similar to those of normal subjects, but patients with middle ear, auditory nerve or lower brainstem dysfunction have reduced reflexes.

Because stimulating one ear results in a bilateral reflex, the test can differentiate two distinct reflex pathways. The contralateral pathway is afferent from the ear to the olivary complex in the brainstem, where it crosses the midline and arcs to the facial nucleus. An efferent impulse then travels down to the stapedial branch and on to the stapedius muscle. The ipsilateral pathway is afferent to the cochlear nucleus where it arcs to the facial nucleus, then becomes efferent and travels down to the stapedial branch and its muscle.[3]

A normal reflex in response to a contralateral signal suggests that the auditory system through the lower brainstem is functioning normally. On the other hand, a normal reflex in response to ipsilateral stimulation, in tandem with an abnormal contralateral reflex, would indicate a lower brainstem disorder. An acoustic nerve lesion abolishes both the ipsilateral and contralateral reflex response to sound on the affected side.

Speech Reception and Discrimination

The speech reception threshold is measured in dB and is defined as the lowest level at which a patient can hear and repeat words. Speech discrimination refers to how well the patient can understand words at quiet, comfortable listening levels, and is expressed as a percentage correct. Good speech discrimination is generally associated with normal hearing and middle ear lesions; fair discrimination with cochlear lesions; and poor discrimination with auditory nerve lesions.

Auditory Brainstem Response (ABR)

Abrupt auditory stimuli, such as a click, will evoke neuro-electrical responses which begin at the cochlea, travel through the auditory nerve and the brainstem, and terminate at the auditory cortex of the temporal lobe. Within the first 10 msec, the evoked responses range from the ear to the higher brainstem auditory pathways. By applying electroencephalography (EEG) techniques to signal-averaging computer technology, we can record this neural activity. The result is typically seven waves, which are labeled with Roman numerals.[4] These waves are thought to represent sequential neural discharges in the auditory nerve, brainstem and midbrain as the evoked response makes its way toward the auditory cortex.[5] While the first two of these waves probably denote auditory nerve activity, the later ones are considered to represent synapse of multiple generators within the brainstem.[6] The test can give a good idea of the integrity of the auditory nerve and brainstem, but may not be site-specific. Deviations from latency and amplitude norms, absence of waves, differences between ears, and inter-wave variations are considered abnormal. The test is also of value in estimating the hearing level of subjects who cannot or will not respond to standard audiometry.

Electronystagmography (ENG)

One of the most frequent complaints a physician hears is that of dizziness, often the manifestation of vertigo. Holt and Thomas[7] reported 69 causes of vertigo. An audiologist can help narrow the search for the cause, because vertigo is commonly accompanied by nystagmus.

Patients with both central and peripheral vestibular lesions often can inhibit nystagmus with visual fixation.[8] Electronystagmography has the advantage of recording nystagmus in darkness, when it cannot be inhibited by visual fixation, but also cannot be observed by the physician.

Nystagmus is usually measured by contact electrodes placed around the eye with the impulses stored on computer. Typical ENG studies include a search for spontaneous and gaze nystagmus, positional nystagmus, and loss of visual-ocular control. Finally, and most important, each peripheral vestibular system is tested by caloric stimulation.

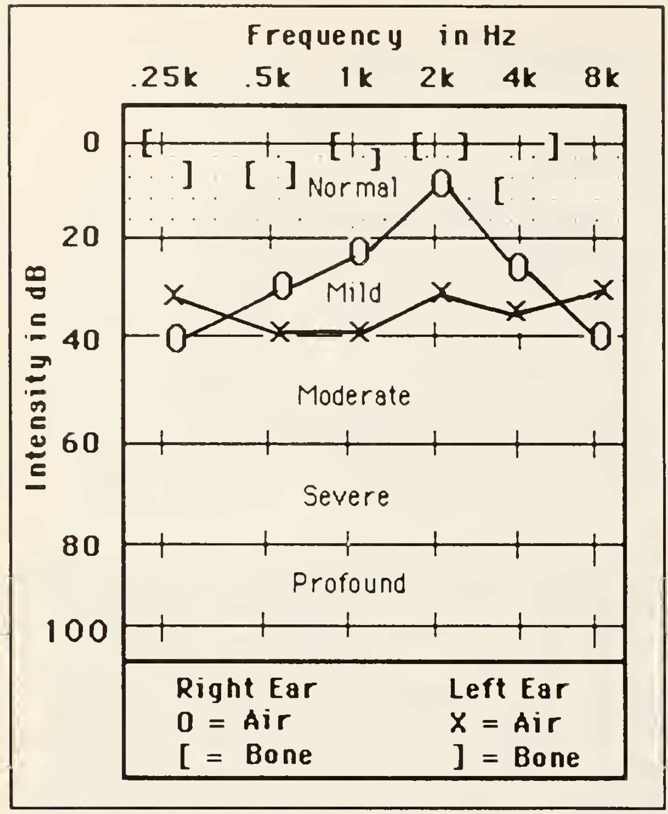


Fig. 1. Audiogram form shows frequencies typically tested along the abscissa and degree of hearing loss in decibels on the ordinate. Range of hearing loss is also illustrated. A bilateral conductive hearing loss is plotted.

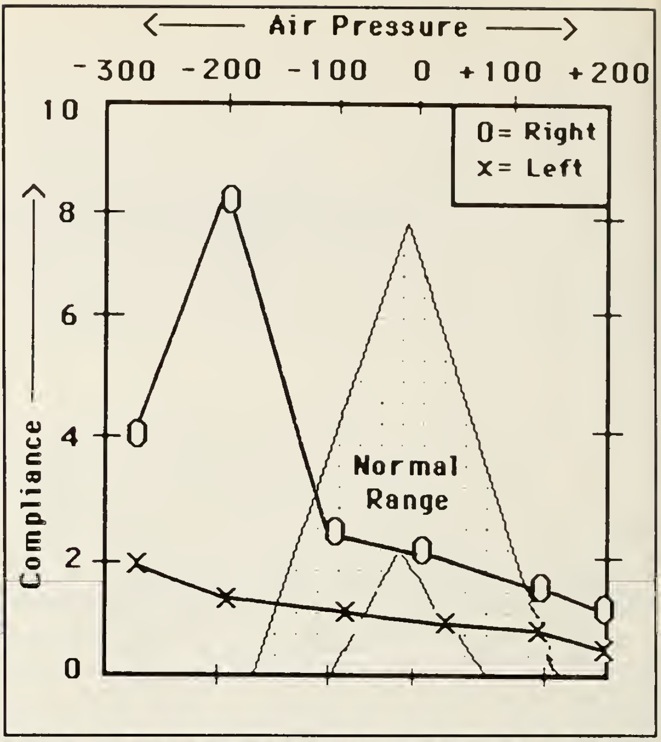


Fig. 2. Tympanogram form shows pressure in mm Wg along abscissa and relative compliance of the conductive system on the ordinate. Normal amplitude and range is illustrated. The result of Eustachian tube dysfunction as, plotted, shows negative middle ear pressure in the right ear while the left middle ear is fluid filled.

The test battery may evaluate the following questions: 1. Is there a lesion that causes the patient's dizzy spells? 2. If so, is the disturbance within the peripheral or central vestibular system? 3. If in the peripheral system, is there involvement of the right ear, left ear or both ears?[9]

Central Auditory Processing

The central auditory nervous system (CANS) extends from the brainstem to the language interpretation areas of the temporal lobe. From a given ear, afferent fibers ascend both sides of the central nervous system, although there are more on the contralateral side. At several levels there are also decussating commissural fibers connecting the two sides.[10]

Under ideal listening conditions, a subject can hear and understand speech even if some of the central auditory pathways are lost through disease as speech is highly redundant. If a signal is less than perfect, however, the patient experiences great difficulty sorting what has been said.

Because of acoustical redundancy, standard tests cannot adequately tax the system. If there is a breakdown in some central pathways, there is still enough information getting through on other tracks for the patient to correctly interpret the test word. To measure the integrity of the central auditory system, redundancy must be reduced. This may be done by mixing speech with noise, filtering out part of the speech sounds, simultaneously presenting different words to each ear, or compressing speech, among other techniques. Under these listening conditions, patients whose central auditory pathways are compromised make lower test scores than normal subjects. The cause of the compromise may be vascular changes, infections, degenerative disease, or brain damage. Hereditary factors also may play a part. While a central processing disorder is a type of learning disability, mental retardation is not necessarily also present. However, persons with this disorder have difficulty processing the spoken word, and they frequently score poorly on intelligence tests founded on oral language skills.

Besides ABR there are many tests of the CANS. Because of their complexity, most are recorded on tape. A selected few of the measures are as follows:

1. Staggered Spondee Word Test measures binaural integration. A different two-syllable word is spoken to each ear in such a way that the last half of one and the first half of the other are presented simultaneously (dichotic). The subject must repeat both words. This test frequently can differentiate brainstem from auditory cortex lesions.[11]

2. Pitch Pattern Test appears to task temporal sequencing skills. It is made up of 60 test groups, each of which has three tones. One tone is a different frequency from the other two. As each group is presented the subject must report the sequence correctly, for example, High-High-Low, or Low-High-Low. The test can detect disturbances within the right auditory cortex and corpus callosum.[12]

3. Speech In Competition measures resistance to distortion. A speech stimulus is degraded by a competing signal presented to either the test ear or the contralateral ear. The subject must ignore the competing signal and respond to the test words. This task is considered sensitive to disturbances throughout the central auditory system.[13]

4. Filtered Speech procedure also measures resistance to distortion. The higher-frequency parts of words are filtered out to reduce their redundancy. The result is a measure of dysfunction of the higher central auditory pathway.[14]

Case Reports

Case #1: The Middle Ear

A 6-year-old boy was seen by a pediatrician because he was inattentive and doing poorly in school. On examination, the nose and throat were normal. Although not completely blocking the ear canal, cerumen obscured the eardrums. Tuning fork tests were inconclusive.

An audiogram revealed a bilateral conductive hearing loss. On the right there was mild hearing loss in the low and high frequencies. The left had a mild flat hearing loss for all frequencies (Fig 1). The tympanometry pattern on the right was type C suggesting mild Eustachian tube dysfunction. On the left, the flat type B pattern of middle ear fluid was present (Fig 2).

Audiometric confirmation of bilateral middle ear pathology with hearing loss allowed the physician to pursue treatment of otitis media with medication. Retesting four weeks later found normal hearing and normal tympanograms.

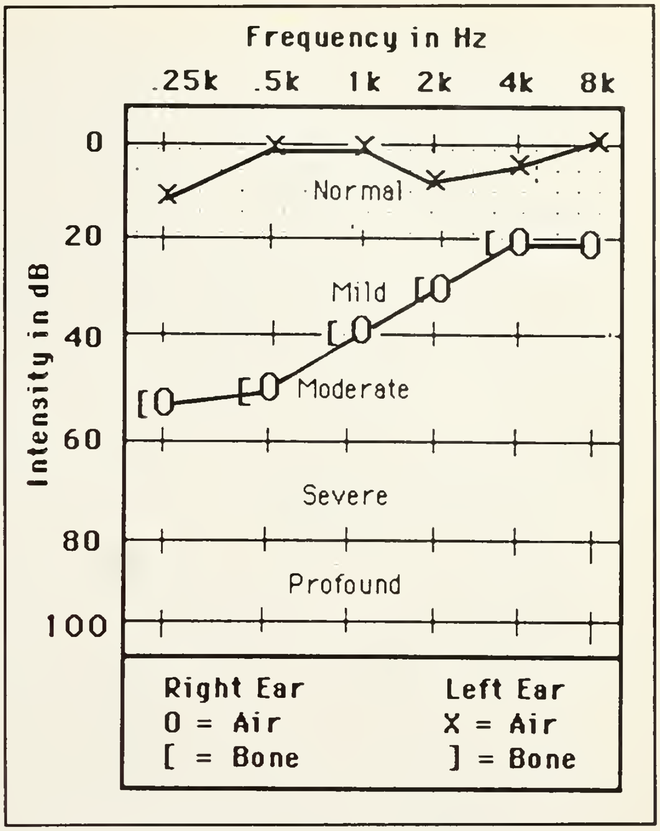
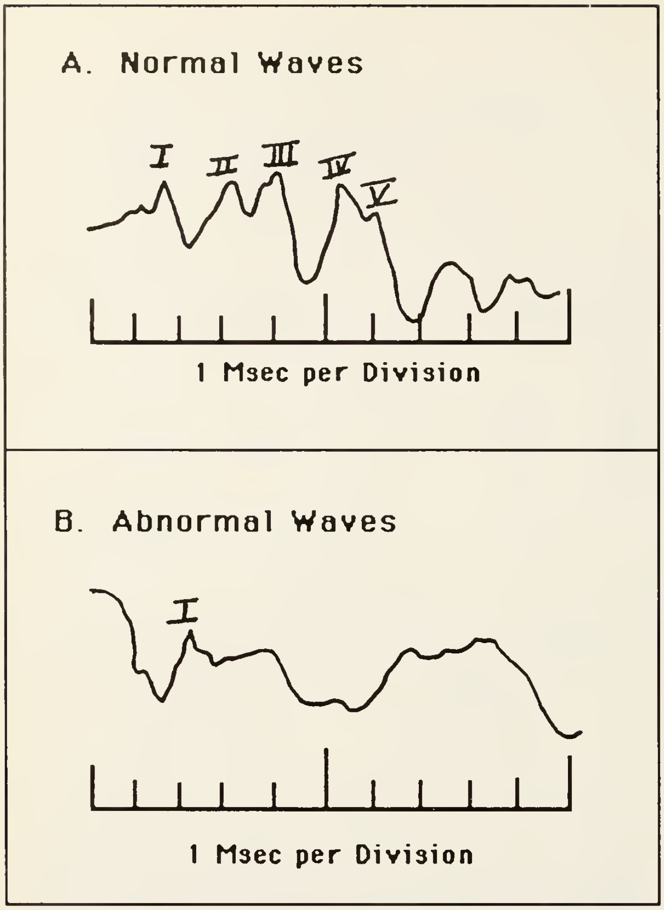


Fig. 3. Audiogram shows a right ear sensorineural hearing loss of type, degree and configuration often seen with Meniere's disease. Left ear hearing is normal.

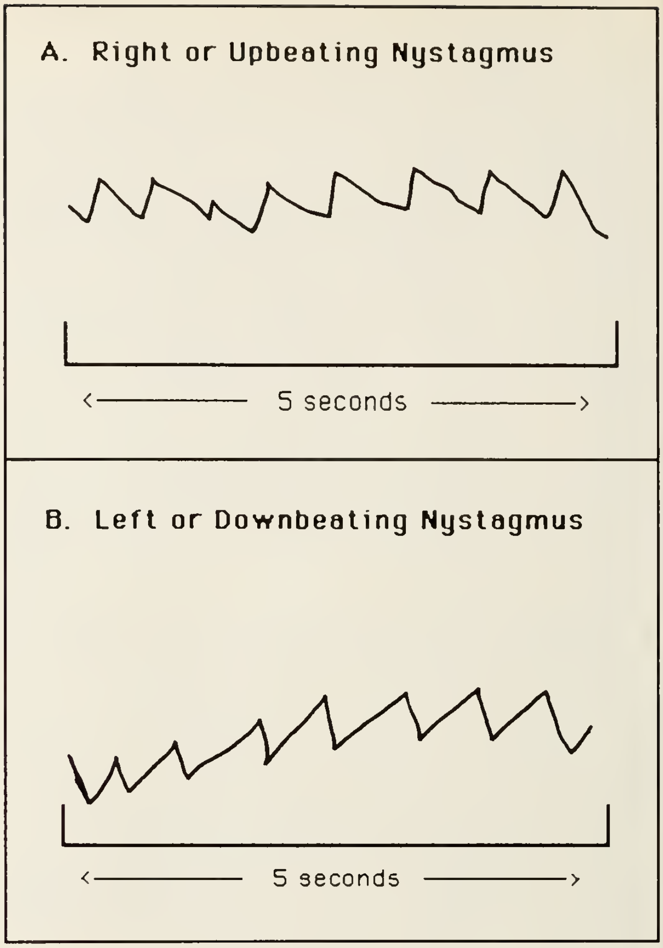
Case #2: The Cochlea

A 45-year-old man was referred to the otologist by his physician. Over the previous five years, he had experienced intermittent hearing loss, roaring tinnitus and sensations of fullness in the right ear. Several times a year, he had periods of vertigo, with nausea and vomiting, that would last from a few hours to several days. Between episodes he was asymptomatic. When the spells first began, his hearing would become poorer in the right ear, but returned following remission. More recently, his hearing was getting subjectively worse, although meclizine had decreased the severity of the vertigo. Otherwise, the patient felt that his health was good.

Examination of the ears and a neurological screening was negative. Audiometry revealed a mild to moderate low frequency sensorineural hearing loss on the right and normal hearing on the left (Fig 3). Speech discrimination was fair on the right with a score of 72%, and good on the left with a score of 100%. Normal tympanograms



Figs. 4A & B. Brainstem evoked potential. **A:** Wave form usually seen with normal acoustic nerve and brainstem function. All waves are present and at appropriate latencies. **B:** Wave form frequently seen with acoustic nerve tumor. Only wave I is present.



Figs. 5A & B. Electronystagmography recording of the quick-slow beats of nystagmus.

and stapedial reflexes on the right, in the presence of a sensorineural hearing loss, indicated cochlear involvement. Normal ABR waves ruled out retrocochlear involvement and further increased confidence that the lesion lay in the cochlea (Fig 4A). Electronystagmography in darkness recorded a left beating nystagmus that increased in amplitude on left gaze (Fig 5B). Results of caloric stimulation showed diminished responsiveness on the right side. These data were consistent with decreased peripheral vestibular function and, along with abnormal audiometry results, confirmed involvement of the entire inner ear. These results along with a history of fluctuating hearing loss, tinnitus, vertigo and sensation of fullness in the right ear allowed a rather confident diagnosis of Meniere's disease.

Untreated, Meniere's disease may progress until both the hearing and balance systems are nonfunctional. This patient was treated with a diuretic (hydrochlorothiazide), which proved to be highly successful. His hearing has improved significantly and the patient has since been asymptomatic.

Case #3: The Acoustic Nerve

A 36-year-old man consulted his physician because of headaches. A history revealed that he had a ringing tinnitus and had been losing the hearing in his left ear. He denied vertigo, but admitted occasional momentary periods of unsteadiness.

Physical examination found the eardrums normal. Pure tone and speech measurements indicated he had normal hearing on the right. The left had a gradually falling mild to moderate sensorineural hearing loss (Fig 6) and speech discrimination was fair, with a score of 60%. Stapedius muscle reflexes were normal in response to right ear stimulation,

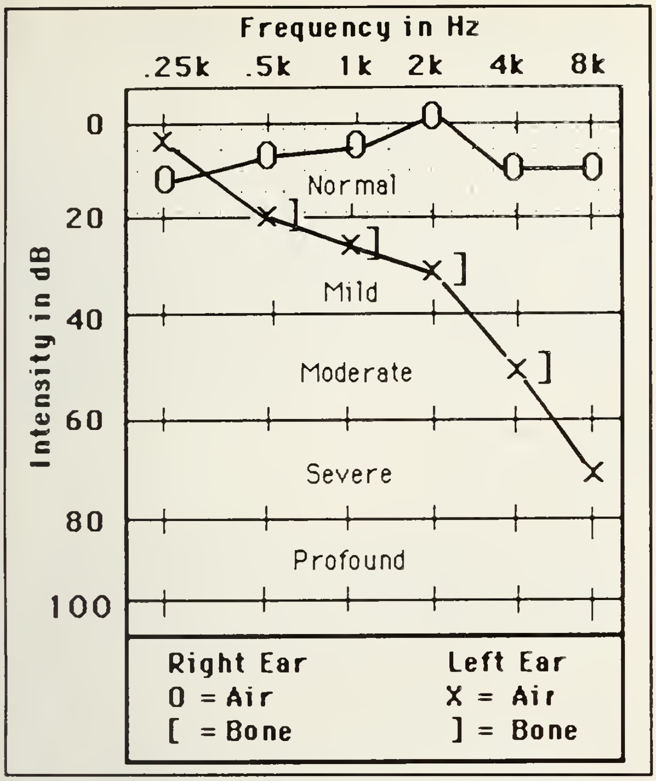


Fig. 6. Audiogram shows normal hearing in the right ear and a sharply falling slight to severe sensorineural hearing loss in the left ear.

but absent when the left was stimulated. Auditory brainstrem response measurements were also normal on the right, with waves I, III, and V easily located. On the left, wave I was present at the expected latency, but waves III and V were absent (Fig 4B). This suggested an acoustic nerve lesion on the left side.

In view of the audiological data, the physician ordered an MRI scan, which uncovered an acoustic neuroma. Two weeks later, a 2 cc acoustic neuroma was excised from the vestibular nerve.

Case #4: The Cerebellum

A 24-year-old woman consulted her internist regarding a sore throat. She received Cefalexin (Keflex), with instructions to return if needed. When she made a second office visit a few days later, she was experiencing spells of vertigo that seemed to be increasing in duration and severity. The tentative diagnosis was vertigo of undetermined cause. Acute labyrinthitis was suspected.

The following morning the patient was seen in the audiology department. By then her spells had increased to two to three per hour and were lasting three to five minutes. Body and head movement exacerbated the dizziness. Some nausea and vomiting, photophobia, and diplopia were also present. The patient denied weakness, focal numbness, tinnitus and paresthesias.

Audiometry with tones, speech discrimination and acoustic reflex evaluations gave normal results bilaterally. These results ruled out peripheral hearing loss and auditory nerve and lower brainstem disturbance. Electronystagmography revealed an up beating nystagmus on primary and upward gaze in darkness (Fig 5A). Vertical gaze nystagmus is invariably associated with central vestibular disorders, whereas horizontal nystagmus may accompany peripheral or central lesions.[15] The patient's physician was advised that ENG data were not consistent with labyrinthitis, but did indicate a potentially more serious central lesion. Computerized tomography (CT) with contrast revealed a questionable area below the tentorium of the left cerebellum. Cerebral angiography and MRI confirmed a venous angioma, with associated hemorrhage, deep in the left cerebellar hemisphere. The patient was to consult a neurosurgeon.

In view of the rare nature of cerebellar strokes, her treatment was conservative. After a course of bed rest and medication, the patient improved, and is presently back in her practice as a physical therapist.[16]

Case #5: The Central Auditory Nervous System (CANS)

Concerned parents consulted a physician regarding their 10-year-old son who was performing poorly in his class work. His school had recommended he be placed in a class for slow learners. He was "getting by" in math, but doing poorly in all other subjects. Prone to distraction, he was easily frustrated and frequently misunderstood the speech of others. In competing noise, such as when watching television or playing with other children, the child often seemed to ignore spoken commands.

The young man passed a physical examination that included a neurological screening. Audiology was the next logical step. Pure tone audiometry found normal hearing in each ear. Speech discrimination scores, when tested under quiet conditions, were 100% bilaterally. Based on the history, several tests of the central auditory nervous system were selected.

The ABR test was normal and ruled out auditory nerve and brainstem disorder. Speech in competing noise test scores were fair on the right, while scores on the left were poor. Filtered speech scores were within the low normal range. Dichotic listening data were similar to those of the competing noise test, with poorer scores on the left. Pitch pattern sequencing measures were low bilaterally. These data confirmed a central auditory processing disorder because there was difficulty in resistance to distortion and temporal sequencing.

The above results were consistent with a disturbance high in the CANS. Although nothing can be done surgically or medically to improve the condition, it is still important to rule out a pathological disorder. Both laboratory and CT studies were negative.

With new ammunition, the parents asked that their son be re-evaluated. The school accepted the audiological diagnosis and agreed to work with the youngster. He was to have special seating in the classroom and extra attention from the teacher. The teacher was now more understanding when the child seemed not to listen. A speech pathologist was to administer language therapy, and the boy was to begin using an FM amplifier system to hear his teacher's instruction more clearly. This system, which works much like a hearing aid, greatly reduces the distracting effects of background noise. These measures have so greatly improved the youngster's performance that he is presently passing his courses and has avoided placement in a special education classroom.

Discussion

The scope of audiology is broad because a large number of diseases can affect the auditory and vestibular systems. For example, reduced hearing sensitivity may range from the external auditory canal to the acoustic nerve. Decreased speech discrimination ability can extend from the cochlea to the auditory cortex. Ear pain and sensations of fullness are common with otitis media, but are not uncommon with Meniere's disease and acoustic nerve tumors. The locus of vertigo may lie anywhere from the labyrinth to the cortex. A child who seems not to comprehend simple commands may have a peripheral hearing loss, a central processing disorder or could have other problems, such as mental retardation. The audiologist frequently can help sort out these dichotomies.

In most cases, no other measure can replace audiometry. None can confidently and inexpensively determine the site of lesion without the auditory system. We must not be lulled into thinking that hearing loss is a benign condition. Several types of tumors have hearing loss as an early symptom.[17] It is also noteworthy that CT may miss acoustic nerve lesions that are detectable with ABR.[18]

While test selection is typically at the discretion of the audiologist, the physician may expect compliance with orders for a specific test. Audiological studies do not presume to determine the cause of a patient's complaints. The responsibility of the audiologist is to define the site of lesion. It is then the physician's job to arrive at the diagnosis. In this way, the physician and audiologist make a powerful team in managing disorders of hearing and balance.

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3. In patients with normal renal function and uncomplicated hepatic dysfunction, the disposition of nizatidine is similar to that in normal subjects.

Laboratory Tests—False-positive tests for urobilinogen with Multistix® may occur during therapy.

Drug Interactions—No interactions have been observed with theophylline, chlordiazepoxide, lorazepam, lidocaine, phenytoin, and warfarin. Axid does not inhibit the cytochrome P-450 enzyme system; therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin daily, increased serum salicylate levels were seen when nizatidine, 150 mg b.i.d., was administered concurrently.

Carcinogenesis, Mutagenesis, Impairment of Fertility—A 2-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a 2-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high-dose males as compared with placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups. The rate of hepatic carcinoma in the high-dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement as compared with concurrent controls and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given an excessive and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery are not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, mouse lymphoma assay, chromosome aberration tests, and a micronucleus test.

In a 2-generation, perinatal and postnatal fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy—Teratogenic Effects—Pregnancy Category C—Oral reproduction studies in rats at doses up to 300 times the human dose and in Dutch Belted rabbits at doses up to 55 times the human dose revealed no evidence of impaired fertility or teratogenic effect; but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in 1 fetus, and at 50 mg/kg, it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in 1 fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers—Studies in lactating women have shown that 0.1% of an oral dose is secreted in human milk in proportion to plasma concentrations. Because of growth depression in pups reared by treated lactating rats, a decision should be made whether to discontinue nursing or the drug, taking into account the importance of the drug to the mother.

Pediatric Use—Safety and effectiveness in children have not been established.

Use in Elderly Patients—Healing rates in elderly patients were similar to those in younger age groups as were the rates of adverse events and laboratory test abnormalities. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Clinical trials of varying durations included almost 5,000 patients. Among the more common adverse events in domestic placebo-controlled trials of over 1,900 nizatidine patients and over 1,300 on placebo, sweating (1% vs 0.2%), urticaria (0.5% vs <0.01%), and somnolence (2.4% vs 1.3%) were significantly more common with nizatidine. It was not possible to determine whether a variety of less common events were due to the drug.

Hepatic—Hepatocellular injury (elevated liver enzyme tests or alkaline phosphatase) possibly or probably related to nizatidine occurred in some patients. In some cases, there was marked elevation (>500 IU/L) in SGOT or SGPT and, in a single instance, SGPT was >2,000 IU/L. The incidence of elevated liver enzymes overall and elevations of up to 3 times the upper limit of normal, however, did not significantly differ from that in placebo patients. All abnormalities were reversible after discontinuation of Axid. Since market introduction, hepatitis and jaundice have been reported. Rare cases of cholestatic or mixed hepatocellular and cholestatic injury with jaundice have been reported with reversal of the abnormalities after discontinuation of Axid.

Cardiovascular—In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in 2 individuals administered Axid and in 3 untreated subjects.

CNS—Rare cases of reversible mental confusion have been reported.

Endocrine—Clinical pharmacology studies and controlled clinical trials showed no evidence of antiandrogenic activity due to nizatidine. Impotence and decreased libido were reported with equal frequency by patients on nizatidine and those on placebo. Gynecomastia has been reported rarely.

Hematologic—Fatal thrombocytopenia was reported in a patient treated with nizatidine and another H_2-receptor antagonist. This patient had previously experienced thrombocytopenia while taking other drugs. Rare cases of thrombocytopenic purpura have been reported.

Integumental—Sweating and urticaria were reported significantly more frequently in nizatidine- than in placebo-treated patients. Rash and exfoliative dermatitis were also reported.

Hypersensitivity—As with other H_2-receptor antagonists, rare cases of anaphylaxis following nizatidine administration have been reported. Rare episodes of hypersensitivity reactions (eg, bronchospasm, laryngeal edema, rash, and eosinophilia) have been reported.

Other—Hyperuricemia unassociated with gout or nephrolithiasis was reported. Eosinophilia, fever, and nausea related to nizatidine have been reported.

Overdosage: Overdoses of Axid have been reported rarely. If overdosage occurs, activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. Renal dialysis does not substantially increase clearance of nizatidine due to its large volume of distribution.

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References
1. Data on file, Lilly Research Laboratories.
2. *Scand J Gastroenterol* 1987;22(suppl 136):61-70.
3. *Scand J Gastroenterol* 1987;22(suppl 136):47-55.
4. *Am J Gastroenterol* 1989;84:769-774.

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Additional information available to the profession on request.

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Continuing Medical Education

The continuing medical education accreditation program of the MSMA has full approval by the AMA's Council on Medical Education. The institutions and functions listed here qualify for Category I credit for the AMA Physician's Recognition Award. All accredited institutions in Missouri are invited to send this information for listing in MISSOURI MEDICINE. Please remember to include the name of the individual who can be contacted at your institution for additional information about your CME events.

October

4 **Sixth Annual John V. King Family Practice Symposium: "Updates in Clinical Practice"** — Location: von Gontard Conference Center, St. John's Mercy Medical Center, St. Louis, MO. Contact: Judith L. O'Guin, St. John's Mercy Medical Center, 615 S. New Ballas Road, St. Louis, MO 63141. 314/569-6000.

4 - 6 **Ozark Chest Conference XI, "New Therapies in Asthma Management and Pulmonary Thromboembolism"** — Location: Tan-Tar-A Resort Hotel, Lake of the Ozarks, MO. Contact: American Lung Association of Western Missouri, 2007 Broadway, Kansas City, MO 64108. 816/842-5242.

5 **Contemporary Concepts in Clinical Cardiology** — Location: The Ritz-Carlton Hotel, St. Louis, MO. Contact: CME Office, St. Louis University Medical Center, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

6 - 7 **Advanced Cardiac Life Support Provider Course** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University Medical Center, CME Office 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-533-2712.

8 - 9 **Primary Care of HIV Disease** — Location: The Ritz-Carlton, St. Louis, MO. Contact: Susan Wightman, R.N., Program Coordinator, Washington University School of Medicine, 4940 Audubon Ave., St. Louis, MO 63110. 314/362-2418.

8 - 10 **Introduction to Doppler Echocardiography** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

9 **Primary Care of HIV Disease** — Location: The Ritz-Carlton, St. Louis, MO. Contact: Susan L. Wightman, R.N., B.S.N., Washington University School of Medicine, 4940 Audubon Ave., Box 8134, St. Louis, MO 63110.

10 **Pediatric Advanced Life Support Recertification Course (PALS)** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University Medical Center, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104-1083. 1-800-533-2712.

10 - 11 **Nursing Microsurgery Workshop - Hands-On Experience** — Location: St. Louis University School of Medicine, St. Louis, MO. Contact: CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

10 - 12 **Black Health Care** — Location: Allis Plaza Hotel, Kansas City, MO. Contact: Barry Kling, University of Missouri School of Medicine, CME Office, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

11 - 12 **Cancer Symposium** — Location: Sheraton at Westport, St. Louis, MO. Contact: St. Louis University School of Medicine, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

13 - 16 **Faculty as Professional Advisor/Evaluator** — Location: Cedar Creek Farm Conference Center, New Haven, MO. Contact: Judith L. O'Guin, St. John's Mercy Medical Center, 615 S. New Ballas Rd., St. Louis, MO 63141. 314/569-6290.

14 **City-Wide Radiology Conference by Daniel K. Kido, M.D., "Functional Neuroanatomy of the Central Nervous System,"** — Location: Mallinckrodt Institute of Radiology, St. Louis, MO. Contact: R. Gilbert Jost, M.D., Chief of Diagnostic Radiology, Mallinckrodt Institute of Radiology, 510 S. Kingshighway, St. Louis, MO 63110. 314/362-7130.

14 - 18 **The Medicolegal Death Investigator Training Course** — Location: St. Louis University, Margaret McCormick Doisy Learning Resources Center, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

15 - 16 **27th Annual Postgraduate Symposium on Medicine and Religion - "Rites of Passage and Rights in Passage: Caring for America's Children** — Location: Battenfield Auditorium, University of Kansas Medical Center, Kansas City, KS. Contact: Monica Scheierman, University of Kansas Medical Center, Office of Continuing Education/SC100, Rainbow and Olathe Blvds., Kansas City, KS 66103. 913/588-4490.

16 **Panic Disorders: The Clinical Challenge** — Location: Hyatt Regency Hotel at Union Station, St. Louis, MO. Contact: CME Office, St. Louis University Medical Center, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

18 **"I Hate You, Don't Leave Me: Dilemmas in the Treatment of Borderline Personality Disorder"** — Location: von Gontard Conference Center, St. John's Mercy Medical Center, St. Louis, MO. Contact: Judith L. O'Guin, St. John's Mercy Medical Center, 615 S. New Ballas Rd., St. Louis, MO 63141. 314/569-6000.

18 - 19 **34th Alumni Weekend, University of Missouri** — Location: Columbia, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Office of Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

18 - 20 **Microsurgery of the Lumbar and Cervical Spine** — Location: St. Louis University School of Medicine, St. Louis, MO. Contact: CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

18 - 20 **The Missouri Regional Meeting, The Missouri Internist** — Location: Lodge of the Four Seasons, Lake of the Ozarks, MO. Contact: The Missouri Regional Meeting, Sara Walker, M.D., 111-F, VA Hospital, 800 Hospital Drive, Columbia, MO 65201.

24 - 27 **Protect Your Medical Practice: Effective Management of Abusable Medications** — Location: Westin Crown Center Hotel, Kansas City, MO. Contact: Barry Kling, University of Missouri School of Medicine, CME Office, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

25 - 26 **Endoscopic & Laser Surgery - "Advances, Complications and Controversies"** — Location: St. Luke's Hospital, St. Louis, MO. Contact: Patty Fogertey, Program Coordinator, Dept. of Education, St. Luke's Hospital Institute for Health Education, 232 South Woods Mill Rd., St. Louis, MO 63017. 314/542-4762.

29 - 30 **Second Annual Spinal Cord Injury Symposium From ICU To Rahab** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

November

5 - 6 **Transesophageal Echocardiography Course** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University Medical Center, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

6 **5th Annual Kansas City Lipid Club Symposium** — Location: Marriott-Overland Park Hotel, Overland Park, KS. Contact: Monica Scheierman, University of Kansas Medical Center, Office of Continuing Education/SC100, Rainbow and Olathe Blvds., Kansas City, KS 66103. 913/588-4490.

7 - 9 **69th Annual Fall Clinical Conference** — Location: Marriott Hotel, Overland Park, KS. Contact: Linda F. Smutz, Kansas City Southwest Clinical Society, 7920 Ward Parkway, Suite 205, Kansas City, MO 64114. 816/523-3383.

7 - 10 **Surgical Approaches to the Skull Base** — Location: St. Louis University School of Medicine, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

11 **City-Wide Radiology Conference by Robert Edelman,M.D., "Advances in Vascular MRI,"** — Location: Mallinckrodt Institute of Radiology, St. Louis, MO. Contact: R. Gilbert Jost, M.D., Chief of Diagnostic Radiology, Mallinckrodt Institute of Radiology, 510 S. Kingshighway, St.Louis, MO 63110. 314/362-7130.

13 **Update on Viral Hepatitis** — Location: von Gontard Conference Center, St. John's Mercy Medical Center, St. Louis, MO. Contact: St. John's Mercy Medical Center, 615 S. New Ballas Rd., St. Louis, MO 63141. 314/569-6930.

13 - 15 **Pediatric Advanced Cardiac & Trauma Support For Life and Pediatric Advanced Life Support Course (PACTS/PALS)** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

15 - 16 **OB/GYN Update 1991** — Location: Holiday Inn Executive Center, Columbia, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

15 - 17 **18th Annual Symposium: Anesthesia and the Geriatric Patient** — Location: The Marriott Pavilion Hotel, St. Louis, MO. Contact: Geriatric Symposium, Dept. of Anesthesiology, Box 8054, Washington University School of Medicine, 660 S. Euclid, St. Louis, MO 63110. 314/362-6975.

16 - 19 **Southern Medical Association 85th Annual Scientific Assembly** — Location: Atlanta, GA. Contact: The Southern Medical Association, 1-800-423-4992.

17 - 20 **Faculty as Small and Large Group Teacher** — Location: Cedar Creek Farm Conference Center, New Haven, MO. Contact: Judith L. O'Guin, St. John's Mercy Medical Center, 314/569-6290.

December

7 **New Perspectives in the Management of Myocardial Ischemia** — Location: Ritz-Carlton of Kansas City, Kansas City, MO. Contact: Monica Scheierman, University of Kansas Medical Center, Office of Continuing Education/SC100, Rainbow and Olathe Blvds., Kansas City, KS 66103. 913/588-4490.

9 **City-Wide Radiology Conference by Michael T. Modic, M.D., "Degenerative Disk Disease and Low Back Pain,"** — Location: Mallinckrodt Institute of Radiology, St. Louis, MO. Contact: R Gilbert Jost, M.D., Chief of Diagnostic Radiology, Mallinkcrodt Institute of Radiology, 510 S. Kingshighway, St. Louis, MO 63110. 314/362-7130.

10 - 12 **Introduction to Doppler Echocardiography** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: CME Office, St. Louis University Medical Center, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

12 - 15 **Cranio Facial Reconstruction** — Location: St. Louis Metropolitan Medical Society Building, St. Louis, MO. Contact: CME Office, St. Louis University Medical Center, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

13 **Postgraduate Symposium on Infectious Diseases** — Location: Hyatt Regency Hotel, Kansas City, MO. Contact: Monica Scheierman, University of Kansas Medical Center, Office of Continuing Education/SC100, Rainbow and Olathe Blvds., Kansas City, KS 66103. 913/588-4490.

January 1992

13 **City-Wide Radiology Conference** — Location: St. Louis University, St. Louis, MO. Contact: R. Gilbert Jost, M.D., Chief of Diagnostic Radiology, Mallinckrodt Institute of Radiology, 510 S. Kingshighway, St. Louis, MO 63110. 314/362-7130.

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Medical School News

St. Louis University

■ Louis University Medical Center now has the first clinical Positron Emission Tomography system, better known as PET, in Missouri. The medical center's staff and faculty will use it for early diagnosis and treatment of cardiac, neurologic and oncologic diseases.

The $5 million PET system has two main units: the PET scanner, and the cyclotron. It can detect changes in metabolism and blood flow. This diagnostic device enables physicians to start treatments earlier than if they had used other diagnostic devices, and may prevent them from performing unneccesary surgery.

According to **James W. Fletcher, M.D.**, professor of internal medicine and director of the nuclear medicine division, the PET allows doctors to analyze a disease as it is developing rather than after it has inflicted damage.

■ **William J. Longmore, Ph.D.**, professor of biochemistry and molecular biology and internal medicine, St. Louis University School of Medicine, has been awarded a five-year, $2.1 million training grant renewal from the National Heart, Lung, and Blood Institute. The grant will be used to fund the "Multidisciplinary Lung Disease Research Training Program."

■ For the third consecutive year, St. Louis University School of Medicine has received a one-year, $47,326 grant from the National Heart, Lung, and Blood Institute for the purchase of small instruments.

The funding will be used to purchase a high-capability scanner, an instrument to perform image analysis, and a small, high-speed centrifuge.

According to **David Lagunoff, M.D.**, assistant vice president for research at St. Louis University Medical Center, the money is specifically allotted for equipment that no single individual could justify purchasing. In return, a large number of researchers is able to benefit.

■ **Howard M. Druce, M.D.**, associate professor of internal medicine in the division of allergy and immunology, and assistant professor of otolaryngology, has been awarded a one-year, $46,900 grant from Bristol-Myers Squibb Pharmaceutical Research Institute to investigate a new drug to treat acute sinusitis. The drug is a new type of cephalosporin antibiotic.

■ **Degang Zhong**, a graduate student in the department of pathology, St. Louis University School of Medicine, has been awarded a $10,000 predoctoral fellowship from the Missouri Affiliate of the American Heart Association to fund a study titled, "Interaction of Factor IX with Factor VIII."

Degang came to the United States from Shanghai, China in 1987.

■ **James H. Boyd, M.D.**, has been named assistant professor of otolaryngology, St. Louis University School of Medicine. Dr. Boyd will help further develop the interdisciplinary sinus clinic. He has particular expertise in both the treatment of patients with head and neck malignancies and in endoscopic sinus surgery.

Dr. Boyd comes to St. Louis from the University of Pittsburgh where he was a fellow in head and neck surgery.

■ **Robert E. Burdge, M.D.**, professor and chairman of orthopedic surgery, St. Louis University School of Medicine, was inducted into the American Orthopaedic Assocation (AOA) at its 104th Annual Meeting in Palm Beach, FL. AOA members are selected for their research, educational and clinical contributions to orthopaedic medicine both nationally and internationally.

■ St. Louis University School of Medicine has received a one-year, $40,000 institutional research grant from the American Cancer Society (ACS). The funds will be used to support initial research by young investigators. The school has been the recipient of institutional grants from the ACS for more than 10 years. The grants have funded many aspects of cancer-related research. Individual awardees are designated within the institution receiving the grants. Last year, ACS funds supported four research projects for $10,000 each.

■ **Daphne deMello, M.D.**, professor of pathology and pediatrics, St. Louis University School of Medicine, has been awarded a one-year, $17,500 grant from the American Lung Association/American Thoracic Society. The grant will be used to fund the study titled,"The Developmental Expression of Lung Surfactant Associated Protein Sp-A in the Fetus of a Diabetic Mother."

Dr. deMello will use an animal model to study the expression of lung surfactant proteins in infants of diabetic mothers. Lung surfactant proteins are important in the pathogenesis of Infantile Respiratory Distress Syndrome (IRDS), a common disorder in infants born prematurely. The risk of infants developing IRDS is more than five times greater in a diabetic compared with a non-diabetic pregnancy.

■ Researchers at St. Louis University School of Medicine say an experimental drug is showing signs of altering the course of rheumatoid arthritis, a crippling disease that affects between 6 million and 7 million people in the United States.

According to **Thomas G. Osborn, M.D.**, associate professor of internal medicine in the division of rheumatology, this is a disease-modifying drug that seems to halt the disease and keep the destruction of the bones and tendons from occurring. The drug also gets rid of the pain, soreness and swelling.

Dr. Osborn has been testing this experimental drug on patients with rheumatoid arthritis for the past two years. He stressed the drug appears to be safe and particularly effective in slowing the speed of destruction in the cartilage, bones and tendons surrounding joints.

■ **Maurice Green, Ph.D.**, professor and chairmen of the institute for Molecular Virology, St. Louis University School of Medicine, was awarded a four-year, $780,263 renewal grant from the National Cancer Institute to study the "Biochemical Functions of Adenovirus Oncogenes."

Dr. Green has been researching adenoviruses for more than 30 years in an effort to gain new insight into what causes cancer. Adenoviruses, or respiratory viruses, contain oncongenes that can transform normal cells into cancerous ones. Dr. Green and his colleagues have succeeded in synthesizing pieces of the cancer-causing proteins encoded in adenovirus oncogenes and are now studying how they function.

■ **Paul Wollenzien, Ph.D.**, associate professor of biochemistry and molecular biology, St. Louis University School of Medicine, has been awarded a five-year, $664,322 grant from the National Institute of General Medical Sciences. He will use the award to study the mechanism of protein synthesis on bacterial ribosomes.

For more than 12 years, Dr. Wollenzien has been researching the process by which ribosomes use genetic information carried by messenger RNA to make proteins. The knowledge gained could lead to the development of medications that would specifically inhibit the development of pathological organisms or diseases. It might also indicate how the mechanism of protein synthesis developed during evolution.

■ **James F. Flood, Ph.D.**, professor of internal medicine in the division of geriatric medicine, St. Louis University School of Medicine, and chief of the neuropharmacology laboratory at John Cochran Veterans Affairs Hospital, has been awarded a four-year, $446,549 grant by the National Institute on Aging.

Dr. Flood will use the funding to study a "Model of Dementia: Senescence Accelerated Mouse (SAM)." He will explore how memory can be improved with pharmacological intervention and study what causes memory dysfunction. He is using the SAM model because these particular mice develop memory problems at eight months of age. Dr. Flood hopes to understand and discover agents that will lead to potential treatments for Alzheimer's disease.

■ **John W. Wallis, Jr., Ph.D.**, assistant professor of biochemistry and molecular biology, St. Louis University School of Medicine, has received the Basil O'Connor Starter Scholar Research Award from the March of Dimes Birth Defects Foundation. The two-year, $60,000 grant is awarded to young physicians or scientists who are committed to researching birth defects.

■ **John C. Clohisy, M.D.**, a resident in the department of orthopedic surgery, St. Louis University School of Medicine, has been awarded two research grants totaling $36,000.

Dr. Clohisy has received a one-year, $21,000 National Aeronautics and Space Administration (NASA) Research Associate Award in support of his work on the "Regulation of Gene Expression in Bone Remodeling." He has also received a one-year, $15,000 grant from the Orthopaedic Research and Education Foundation for his research using specific staining techniques for the analysis of bone tumors. The aim of this project is to facilitate the differentiation between benign and malignant bone tumors.

■ **Gary Spitzer, M.D.**, professor of internal medicine, St. Louis University School of Medicine, has been appointed director of the new division of bone marrow transplantation, oncology and hematology.

According to **Coy D. Fitch, M.D.**, Drefs professor and chairman of the department of internal medicine, it was decided to combine the divisions of oncology and hematology and to rename the division as bone marrow transplantation, oncology and hematology because the fields are so inter-related.

A native of Australia, Dr. Spitzer received his medical degree from Melbourne University in 1967.

Washington University

■ **Morton E. Smith, M.D.**, has been named associate dean for postgraduate education at Washington University School of Medicine in St. Louis.

The appointment became effective September 1 and was announced by **William A. Peck, M.D.**, vice chancellor for medical affairs and dean of the School of Medicine.

Dr. Smith replaces **Elmer B. Brown, M.D.**, who is retiring after 37 years of service to the university. In his new role, Dr. Smith will oversee all continuing medical education courses offered at the School of Medicine. A professor of pathology and of ophthalmology and visual sciences, he will continue to serve as director of ophthalmic pathology and as director of ophthalmology courses for medical students.

Dr. Smith joined the School of Medicine faculty in 1965 as an instructor in ophthalmology. He became a full professor in 1975 and in 1978 was named assistant dean.

■ **Carolyn M. Baum**, assistant professor and Elias Michael Director of the Program in Occupational Therapy at Washington University School of Medicine in St. Louis, has been selected to serve on the advisory board of the newly established National Center for Medical Rehabilitation Research (NCMRR).

The year-long term began July 1. As a board member, Baum will assess federal research priorities, activities and findings related to medical rehabilitation. The board also will advise the directors of the National Institutes of Health, the National Institute of Child Health and Human Development and the NCMRR regarding the center's medical rehabilitation research and training programs.

Baum has been director of the Program in Occupational Therapy since 1988 and also directs clinical services at the School of Medicine's Irene Walter Johnson Institute of Rehabilitation. Her research includes an investigation on the functional changes in patients with Alzheimer's disease and the burden the disease places on family and family structure. She is conducting the study through the medical school's Memory and Aging Project, collaborating with the project's director, **Leonard Berg, M.D.**

Baum is pursuing a doctorate in gerontology and social policy at the university's George Warren Brown School of Social Work.

■ **Eduardo Slatopolsky, M.D.**, has been named the Joseph Friedman Professor of Renal Diseases in Medicine at Washington University School of Medicine in St. Louis.

Slatopolsky is professor of medicine and director of the Chromalloy American Kidney Center at Washington University. In his appointment as Friedman Professor, he succeeds **Saulo Klahr, M.D.**, now chairman of the Department of Medicine at Jewish Hospital. The Friedman professorship was established in 1986.

A native of Argentina, Slatopolsky has been affiliated with Washington University since 1963.

■ The three men who have led Washington University School of Medicine's Department of Molecular Biology and Pharmacology over the last 44 years gathered May 16 to deliver the school's 14th Annual Oliver H. Lowry Lecture in Pharmacology.

Oliver H. Lowry, M.D., Ph.D., Philip Needleman, Ph.D., and **Jeffrey I. Gordon, M.D.**, discussed "Pharmacology: Generational Views and Thoughts."

Lowry, distinguished professor emeritus and lecturer, served as head of the pharmacology department from 1947-76 and served again as acting head from 1989-90. He is an internationally renowned histochemist whose techniques and approaches have had a profound effect on neurobiology, neurochemistry and biochemistry.

Dr. Needleman is corporate vice president of research and development and chief scientist of the Monsanto Company. Head of pharmacology at Washington University from 1976-89, he maintains an appointment as research professor of molecular biology and pharmacology. He is recognized worldwide for his research on the mechanisms of blood pressure regulation. His early studies on the pharmacology of organic nitrates had a major impact in the treatment of angina pectoris.

Dr. Gordon was appointed chairman and alumni professor of the Department of Molecular Biology and Pharmacology last January. For the last eight years, he has studied a family of lipid-binding proteins and their genes, using a variety of methods. In separate research, his team's work has led to the development of a new class of compounds that has inhibited replication of the AIDS virus in cultured human white blood cells.

The Lowry lecture is sponsored by the Department of Molecular Biology and Pharmacology to honor Dr. Lowry.

■ Parents still using polystyrene-filled cushions, banned last year by the Consumer Product Safety Commission, are endangering their babies' lives, warn the authors of a report in the June 27 issue of the *New England Journal of Medicine*.

The cushions may cause accidental death by limiting infants' ability to move their heads, thus preventing them from obtaining fresh air, say researchers at Children's Hospital and Washington University School of Medicine in St. Louis.

James S. Kemp, M.D., and **Bradley T. Thach, M.D.**, studied the deaths of 25 infants, most of whom had died face down on polystyrene bead-filled cushions. Autopsies had been conducted on 23 infants, and in 19, the death was attributed to Sudden Infant Death Syndrome (SIDS). However, Kemp and Thack's study concluded that the majority of the deaths were due instead to rebreathing, a form of accidental suffocation.

That the deaths had been diagnosed as SIDS on postmortem examination is not surprising, Drs. Kemp and Thach say. Standard thinking is that on typical bedding, normal two to three-month-old babies are easily able to turn their heads when they need fresh air. Suffocation is not generally considered unless the baby's head has been entrapped or its nose and mouth are covered by impermeable material, such as plastic. Very often there are no marks, making it impossible to distinguish between SIDS and suffocation.

The doctors' findings indicate that if an infant is lying face down with the nose and mouth resting on the cushion, the material can mold about the infant's head so closely that head movement is hindered. That forces the baby to rebreath expired air, which contains low levels of oxygen. The amount of rebreathing they estimated to have occurred in the infants was lethal in an animal model.

Polystyrene-filled cushions were marketed as a gentle restraint to keep babies from rolling, Dr. Kemp says. He adds that though no longer manufactured, the cushions are reportedly still available secondhand.

Dr. Kemp and Dr. Thack, a professor of newborn medicine, are calling for new safety standards for infant bedding.

■ **Michael A. Kass, M.D.**, professor of ophthalmology and visual sciences at Washington University School of Medicine in St. Louis, has been named editor-in-chief of the *American Journal of Ophthalmology*. He will assume duties January 1.

Kass, who is on staff at Barnes and St. Louis Children's hospitals at Washington University Medical Center, has worked with the journal since 1985, when he became an associate editor. Last year he became the abstract editor of the journal and a director of its publishing company.

■ Washington University in St. Louis, which is one of only a handful of medical schools nationwide to reach its 10th anniversary, has chosen a unique way to mark the event. The School of Medicine, in collaboration with the university's Performing Arts Department, has commissioned a play by **Jim Leonard, Jr.**, titled, "Gray's Anatomy."

The play will be performed October 11-13 and 18-20 in the university's Edison Theatre.

"Gray's Anatomy" is set in a remote Midwestern town at the turn of the century when medical practice was simpler. In those days, becoming a doctor required a single year of study, and often doctors could provide only comfort to the sick and dying. The townsfolk in the play never feel the need for a doctor until a mysterious and deadly fever ravages the town. In desperation, one young girl writes a letter requesting a doctor so her family and friends can be saved.

Months later, **Dr. Galen Gray** makes a dramatic entrance, arriving during a violent tornado. Although he is an outsider, he earns everyone's respect and gratitude when he appears to wipe out the fever. He also diagnoses all sorts of other afflictions people didn't even know they had, from arthritis to ulcers. Ironically, once people have names for their everyday aches, they are bothered more and more by them.

Finally, a disease comes that the doctor can't cure. The townspeople's growing doubt and mistrust of their doctor and fear of the new fever drive the play to its gripping climax.

Playwright Leonard uses the play as a vehicle to examine many issues in modern medicine, some of which have changed (doctors now offer cure instead of comfort) and some of which have not changed (doctors still fear many of their patient's diseases).

Leonard, the playwright-in-residence at Arizona State University in Tempe, Arizona, is a talented young writer with numerous productions to his credit. Many of his plays are set in small towns and, as *New York Magazine* notes, "render the humor and horror of the hinterlands with staggering accuracy."

Henry I. Schvey, chair of the university's Performing Arts Department, will direct this world premiere of "Gray's Anatomy."

For more information, call 314/ 935-5858.

University of Missouri- Columbia

■ Under an agreement reached recently between MU and Xian Medical University, six Chinese scholars are visiting the MU campus this fall to collaborate with faculty and learn about American medical technology and expertise.

The visitors will study surgery, pulmonary medicine, reproductive science and cervical cancer diagnosis and treatment. Two will learn about managerial procedures, one about hospital administration and the other about research administration.

The MU-Xian collaboration, which has been discussed for two years, was approved by campus administration and then signed by the president of Xian Medical University during the recent visit of five Health Sciences Center administrators and faculty to China. The document is effective for three years, after which it can be renewed.

The agreement notes as its objectives the "exchange of information, joint research projects when mutually agreeable and promotion of academic, educational and clinical exchange of expertise."

The outlined areas of exchange are reproductive science, particularly family planning; cardiac surgery and cardiology; cervical cancer; and other specialties mutually agreed upon by both universities.

According to **Lester Bryant, M.D.**, dean of the MU School of Medicine, the visiting scholars from Xian will return to their country with knowledge of the most current medical procedures that will help them better educate China's future physicians.

■ **Richard A. Holmes, M.D.**, professor and chief of nuclear medicine, is taking a leave of absence to serve as interim chairman of medicine at the Charles R. Drew University of Medicine and Science in Los Angeles, one of the nation's four predominantly black medical schools.

Richard Holmes M.D.

Since its last permanent chairman left six years ago, the department has verged on losing its accreditation.

Dr. Holmes helped design the first brain-imaging drug that could be used with conventional scanning equipment. Another drug, now in the Food and Drug Administration's approval process, offers a promising way to treat bone cancer pain.

Drew University opened in 1978 in the Compton, Calif., area as a community response to the devastating Watts riots of 1968. The neighborhood, once almost all black, now has a considerable Hispanic population, according to Dr. Holmes. It remains in much need of ethnic health-care professionals.

Drew's students spend their first two years of medical school at the

University of California at Los Angeles and then complete two years of clinical rotations at Drew and the Martin Luther King Jr. General Hospital, a county medical center. The school also educates nurses and allied health professionals.

In Holmes' absence, **Amolak Singh, M.D.**, associate professor of radiology, will head the division of nuclear medicine both at the University and the Harry S. Truman Memorial Veterans Hospital.

■ **G.W.N. Eggers, M.D.**, professor and chairman of anesthesiology, will be installed as president of the American Society of Anesthesiologists October 30 at the group's annual meeting in San Francisco. With 28,000 members, the society is the principal professional organization for the specialty in the United States and the largest association of anesthesiologists in the world. Eggers, who has been an MU faculty member since 1961, has chaired the department since 1969. He has served on the ASA's Board of Directors, as vice president for scientific affairs and as first vice president. He was voted president-elect at last year's meeting.

G.W.N. Eggers, M.D.

■ **Armando R. Favazza, M.D.**, professor of psychiatry, was honored recently in a Missouri Senate proclamation. The document recognized Favazza for his idea to establish a college license plate program for Missouri. The provision, which became effective in July 1990, allows colleges and universities to obtain funds for academically related purposes by authorizing the use of their official emblem on personalized license plates.

■ **Robert Gaines, M.D.**, professor of orthopedic surgery, has been elected to the editorial board of the journal *Spine*.

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AIR FORCE

Resident Section News

A Polymerization of Power

Maria L. Evans, M.D.

Herodotus once wrote that the "bitterest pain among men" was "to have much knowledge but no power." Benjamin Disraeli stated that "power is a trust," and that we are "accountable for its exercise." (In fact, Bartlett's Familiar Quotations lists 199 quotes containing the word "power!") An old hymn reminds us that " There is power in the blood," while a recent pharmaceutical ad touts an antibiotic's ability to provide "more power to the prostate." Obviously, our society takes a great deal of stock in the concept of power.

One of the goals of MSMA's new president, Dr. Dorothy D. Reister, is to significantly increase membership in MSMA — because in organizations, **membership is power**. A direct translation of this can be seen in the AMA House of Delegates. One thousand MSMA members equals one seat in the AMA-HOD. Missouri presently has seven seats in the AMA House of Delegates. If MSMA could recruit 1000 new members, it would have one more delegate — one more warm body, one more voice, one more bargaining chip in the world's largest body of organized medicine.

Now let's look at some of the present demographics of the MSMA-RPS. Missouri has more than 1200 resident physicians. Of that number, approximately 700 are AMA members. Only about 200 of Missouri's residents are MSMA members. Our section **alone** has the potential to provide half a seat in the AMA-HOD! Can you imagine the power our section would have within the MSMA framework if we could single-handedly provide half a seat in the House of Delegates?

In addition, our resident section is extremely fortunate as compared to other state medical societies when one looks at the distribution of power. Most state medical societies provide one seat in their state association's house of delegate — MSMA has allocated **six** seats. We already have a more powerful voice in our own state medical association than most states' residents. How then do we maximize the power already entrusted to us? By maximizing our efforts in two areas — more members and more active members. Let's explore both avenues.

More Members. Those of us who are already MSMA members have many reasons for having joined the association. We need to share these reasons with our colleagues and encourage them to join. This becomes especially important in the case of those who are AMA members but haven't joined MSMA. These residents obviously understand the benefits of organized medicine, but need to be reminded that the MSMA does the "grass roots" work for the AMA here in Missouri — and that what happens in the halls of Jefferson City often hits closer to home than what happens in the halls of Washington, D.C.

One doesn't have to "glad-hand" to recruit members either. Invite a friend to the MSMA Convention or to an MSMA-sponsored seminar or activity. Share your copy of *Missouri Medicine* in your resident room. You'll be surprised at the results.

More Active Members. Our section is a relatively new one within the MSMA, in many ways, still in the process of organization. You can be a vital liaison to the MSMA-RPS Governing Council in a number of ways. If your program has a housestaff organization, become an active part of it. If not, perhaps you can help organize one. Ideally, we need one individual from each program to help provide information for this column. If you would like to be that person, please contact me at the address below. By reporting the goings-on and accomplishments of the residents at your program, we can provide a means of recognition for residents throughout the state. Besides, **everyone** likes to see his or her name in print! More recognition equals more members — and that equals more power.

I strongly encourage any submissions you might have for inclusion in RPS News. As a group, we can accomplish a great deal if we seize the opportunity now. By increasing our own power, we can empower the MSMA to better provide for its members.

If you have submissions for Resident News, please mail to: **Maria L. Evans, M.D.,** Department of Pathology, M263, University Hospital & Clinics, One Hospital Drive, Columbia, MO 65212. Phone: 314/882-1201.

■

New Members

■ **Mary L. Rardin, M.D.,** Swope Parkway Health Center, 4900 Swope Parkway, Kansas City 64130, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. Rardin received her preliminary education at Washburn University and obtained her medical degree at the University of Kansas School of Medicine in 1977. She completed her residency at Wesley Medical Center, Wichita, KS. Dr. Rardin specializes in family practice.

■ Resident Section

Martin A. Docherty, M.D. — *internal medicine*
Ryia Ross, M.D. — *pediatrics*

■ Student Section

St. Louis University

Stephen C. Eliason
Katrina R. Wade

University of Missouri-Kansas City

Nagla Abdelmalek
Treneth Baker
Laura C. Cox
Sharon M. Dunski
Lisa C. Gennari
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Physician's Recognition Awards

Thirty-seven MSMA members qualified for the MSMA-AMA Physician's Recognition Award during July 1991. The award, presented by the Missouri State Medical Association and the American Medical Association, is given to those physicians who voluntarily complete 150 credit hours of continuing medical education within a three-year period. Sixty of the credit hours must be earned in Category 1 programs.

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Buchanan

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Charles K. Goeking, *St. Joseph*
Mignon M. Makos, *St. Joseph*

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Nazar Chand, *Poplar Bluff*
Robert L. Dever, *Poplar Bluff*

Cape Girardeau

Walter A. Schroeder, *Cape Girardeau*

Cole

David D.L. Scherr, *Jefferson City*

Greene

William K. Rosen, *Springfield*
Arlen D. Winsky, *Springfield*

Jasper

Orville A. Mehaffy, *Joplin*

Metro Med of Greater Kansas City

Bela Csaki, *Independence*
Terrence Curran, *Kansas City*
Alexander C. Davis, *Kansas City*
William J. Huse, *Kansas City*
John K. Layle, *Kansas City*
Peter J. Muelleman, *Independence*
Katherine A. Smith, *Kansas City*
Charles K. Whittaker, *Kansas City*

Mid-Missouri

Eugene F. White, *Rolla*

Northeast

Sandra J. Ahlum, *Hannibal*

Ozarks

Samuel M. Watts, *Aurora*

St. Louis Metro

Matthias H. Backer, *St. Louis*
Robert E. Bolinske, *St. Louis*
Arthur L. Casey, *St. Louis*
Ruth C. Comens, *St. Louis*
Richard J. Gimpelson, *St. Louis*
Joseph M. Graham, *St. Louis*
Shigemasa Ikeda, *St. Louis*
Juan Kang, *St. Louis*
Rolf J. Krojanker, *St. Louis*
Prabha Partap, *St. Louis*
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MEDICAL DIRECTOR OF MENTAL HEALTH SERVICES: Christian Hospital, a 728-bed, two division acute care facility located in North St. Louis County, is currently seeking a Medical Director for its 96-bed Psychiatric/Chemical Dependency Unit. The program housed in the center's contemporary, open environment, meets a broad spectrum of needs – from psychiatric intensive care and out-patient programs to chemical dependency in-patient, day treatment and out-patient programs. The facility is also a convenient location for meetings of mental health support groups and educational forums. The range of programs offered by The Center for Mental Health provides a continuum of mental healthcare that will accommodate a wide range of in-patient and out-patient needs. The ideal candidate will be well-trained in the field of psychiatric medicine and be able to demonstrate a proven managerial ability. If you are interested in this outstanding practice opportunity, please contact or send your resume in confidence to: Daniel W. Brewer, Executive Employment, Christian Hospital Northeast, 11133 Dunn Road, St. Louis, Mo 63136. 314/355-2500, Ext. 5543.

OB/GYN: Sole female practitioner seeks an associate, male or female, for busy OB/GYN practice in Johnson County, Kansas (Suburb of Kansas City). Office located next to hospital. Competitive starting salary and benefits. Excellent growth potential. Good schools, housing and recreation facilities. Close to metropolitan shopping. Semi-retired OB/GYN will be considered. Send resume to: c/o OB/GYN, 10308 Metcalf, Suite 269, Overland Park, KS 66212.

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INTERNAL MEDICINE: Shenandoah, Iowa, well balanced practice opportunity including consultations and procedures, good on-call schedule with BC Internist. Desirable, family-oriented community with very sound economic base. Progressive hospital with congenial medical staff and subspecialty clinic program.

Physicians Wanted

Contact David Drew, Administrator, Shenandoah Memorial Hospital, 300 Pershing, Shenandoah, Iowa 51601 or call: 712/246-1230.

PHYSICIAN OPPORTUNITY exists at this 204-bed medical center for a BC/BE Internist or Family Practitioner to work in our ambulatory care section. Join the nation's largest health care team. Licensure any state. Must meet English proficiency requirement. Competitive salary with excellent benefits. Enjoy Grand Island, Nebraska, named one of the 50 best towns in American and three-time recipient of the All-American City Award. Contact or send CV to: **Stephen W. Maks, M.D., Chief of Staff, VA Medical Center, 2201 N. Broadwell, Grand Island, NE 68803. 308/382-3660, Ext. 2106.** "Equal Opportunity Employer."

FAMILY PRACTICE PHYSICIAN: to join well established group practice in St. Louis County. Must be Board Certified or Eligible for Family Practice. Excellent compensation and full partnership potential. No obstetrics. All the cultural activities of a metropolitan area available but still has midwestern flavor of life. Send C.V. to: William R. Green, M.D., Macon Medical Center, 7200 Manchester, St. Louis, MO 63143, or call 314/645-7744.

CRITICAL CARE PHYSICIAN: Full or part-time Critical Care House Physician needed for a full service 604-bed hospital located in suburban St. Louis, Missouri. Salary competitive and negotiable depending upon experience. Fringe benefits include: vacation, sick leave, CME allowance, health & life insurance, pension plan and liability coverage. Must have completed training in Critical Care and be either board eligible or board certified. Interested candidates should contact: DePaul Health Center, Mary Jo Gorman, M.D., Acting Chairman, Critical Care Medicine, C/O Medical Staff Office, 12303 DePaul Drive, Bridgeton, Missouri 63044. 314/344-6071. EOE M/F/V/H.

PRIMARY CARE PHYSICIANS needed to provide general medical care in Missouri correctional facilities and mental health facilities in Central and Southwest Illinois. Light Workload. Proper Licensure Required. Send CV or Contact in Confidence: ANNASHAE CORPORATION, 230 Alpha Park, Cleveland, Ohio 44143-2202; 1-800-245-2662. EEC/MF.

INTERNAL MEDICINE: Springfield, Missouri; 230,000 metro population near Ozark mountains; 7-physician IM group — one member near retirement; diverse, growing practice; call shared equally; affiliation with several major hospitals; optional teaching; competitive income; Contact: Phil Kelbe, 414/347-7841 (No fees involved).

PRIMARY CARE PHYSICIANS: A local community based hospital is seeking qualified physicians for the emergency department. Competitive salary and benefits — low volume, flexible hours. Possible assistance with development of private practice. Send CV to: James Criscione, Jr., M.D., Medical Director, Incarnate Word Hospital Emergency Department, 3545 Lafayette Avenue, St. Louis, MO 63104.

FAMILY PHYSICIAN: Excellent opportunity for BC/BE family physician to join a well-established practice. Ideal suburban location. A unique opportunity to practice family medicine in a group setting with physicians who enjoy an excellent reputation in the community. Competitive salary and benefits. Reply will be kept strictly confidential. Contact: Ron Dover, Olathe Medical Center, 20375 W. 151st Street, Suite 351, Olathe, KS 66061. 913/791-4467.

INTERNIST WANTED. BE/BC to join the medical staff of the Samuel U. Rodgers Health Center. Provides an opportunity to practice in an outpatient setting with inpatient activities and faculty appointment at the local medical school. Competitive salary and fringe benefits. Excellent hours and call schedule. Send C.V.: Jay T. Backstrom, M.D., Medical Director, 825 Euclid, Kansas City, MO 64124.

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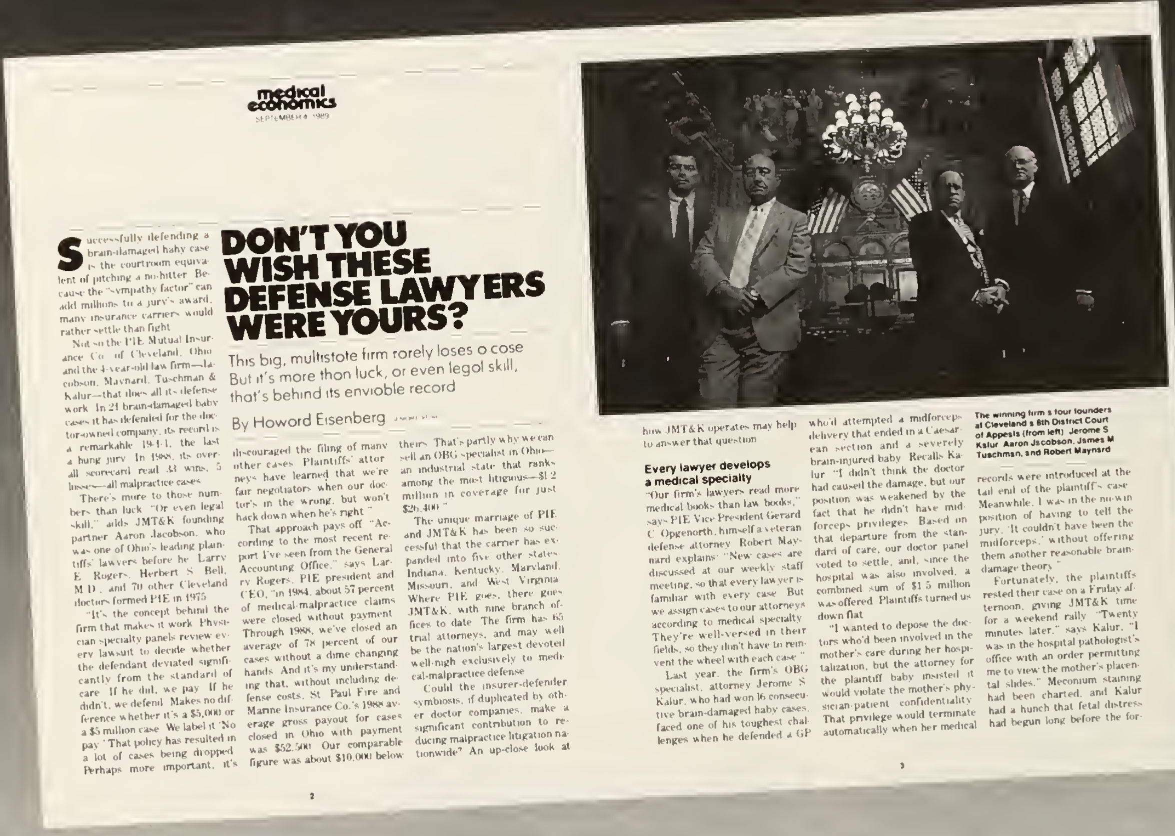

medical economics
SEPTEMBER 4, 1989

DON'T YOU WISH THESE DEFENSE LAWYERS WERE YOURS?

This big, multistate firm rarely loses a case. But it's more than luck, or even legal skill, that's behind its enviable record.

By Howard Eisenberg

Successfully defending a brain-damaged baby case is the courtroom equivalent of pitching a no-hitter. Because the "sympathy factor" can add millions to a jury's award, many insurance carriers would rather settle than fight.

Not so the PIE Mutual Insurance Co. of Cleveland, Ohio, and the 4-year-old law firm—Jacobson, Maynard, Tuschman & Kalur—that does all its defense work. In 21 brain-damaged baby cases it has defended for the doctor-owned company, its record is a remarkable 19-1-1, the last a hung jury. In 1988, its overall scorecard read 33 wins, 5 losses—all malpractice cases.

There's more to those numbers than luck. "Or even legal skill," adds JMT&K founding partner Aaron Jacobson, who was one of Ohio's leading plaintiffs' lawyers before he, Larry E. Rogers, Herbert S. Bell, M.D., and 70 other Cleveland doctors formed PIE in 1975.

"It's the concept behind the firm that makes it work. Physician specialty panels review every lawsuit to decide whether the defendant deviated significantly from the standard of care. If he did, we pay. If he didn't, we defend. Makes no difference whether it's a $5,000 or a $5 million case. We label it 'No pay.' That policy has resulted in a lot of cases being dropped. Perhaps more important, it's discouraged the filing of many other cases. Plaintiffs' attorneys have learned that we're fair negotiators when our doctor's in the wrong, but won't back down when he's right."

That approach pays off. "According to the most recent report I've seen from the General Accounting Office," says Larry Rogers, PIE president and CEO, "in 1984, about 57 percent of medical-malpractice claims were closed without payment. Through 1988, we've closed an average of 78 percent of our cases without a dime changing hands. And it's my understanding that, without including defense costs, St. Paul Fire and Marine Insurance Co.'s 1988 average gross payout for cases closed in Ohio with payment was $52,500. Our comparable figure was about $10,000 below theirs. That's partly why we can sell an OBG specialist in Ohio—an industrial state that ranks among the most litigious—$1.2 million in coverage for just $26,400."

The unique marriage of PIE and JMT&K has been so successful that the carrier has expanded into five other states: Indiana, Kentucky, Maryland, Missouri, and West Virginia. Where PIE goes, there goes JMT&K, with nine branch offices to date. The firm has 65 trial attorneys, and may well be the nation's largest devoted well-nigh exclusively to medical-malpractice defense.

Could the insurer-defender symbiosis, if duplicated by other doctor companies, make a significant contribution to reducing malpractice litigation nationwide? An up-close look at how JMT&K operates may help to answer that question.

Every lawyer develops a medical specialty

"Our firm's lawyers read more medical books than law books," says PIE Vice President Gerard C. Opgenorth, himself a veteran defense attorney. Robert Maynard explains: "New cases are discussed at our weekly staff meeting, so that every lawyer is familiar with every case. But we assign cases to our attorneys according to medical specialty. They're well-versed in their fields, so they don't have to reinvent the wheel with each case."

Last year, the firm's OBG specialist, attorney Jerome S. Kalur, who had won 16 consecutive brain-damaged baby cases, faced one of his toughest challenges when he defended a GP who'd attempted a midforceps delivery that ended in a Caesarean section and a severely brain-injured baby. Recalls Kalur: "I didn't think the doctor had caused the damage, but our position was weakened by the fact that he didn't have midforceps privileges. Based on that departure from the standard of care, our doctor panel voted to settle, and, since the hospital was also involved, a combined sum of $1.5 million was offered. Plaintiffs turned us down flat.

"I wanted to depose the doctors who'd been involved in the mother's care during her hospitalization, but the attorney for the plaintiff baby insisted it would violate the mother's physician-patient confidentiality. That privilege would terminate automatically when her medical records were introduced at the tail end of the plaintiff's case. Meanwhile, I was in the no-win position of having to tell the jury, 'It couldn't have been the midforceps,' without offering them another reasonable brain-damage theory."

Fortunately, the plaintiffs rested their case on a Friday afternoon, giving JMT&K time for a weekend rally. "Twenty minutes later," says Kalur, "I was in the hospital pathologist's office with an order permitting me to view the mother's placental slides." Meconium staining had been charted, and Kalur had a hunch that fetal distress had begun long before the for-

The winning firm's four founders at Cleveland's 8th District Court of Appeals (from left): Jerome S. Kalur, Aaron Jacobson, James M. Tuschman, and Robert Maynard.

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On July 29, the Department of Health and Human Services issued new rules related to physician and hospital interest in facilities to which they make referrals.

Under the new rules, investors in such businesses may be subject to prosecution and exclusion from Medicare and Medicaid unless they meet certain criteria.

Two criteria include:

- No more than 40% of the business may be owned by doctors or hospitals in a position to refer patients; and
- No more than 40% of the revenue may come from referrals by such investors.

If you are affected by these regulations and seek to sell or restructure your interest in such businesses, we invite you to call for a confidential meeting.

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The recommended starting dose for Calan SR is 180 mg once daily. Dose titration will be required in some patients to achieve blood pressure control.

A lower initial starting dosage of 120 mg/day may be warranted in some patients (eg, the elderly, patients of small stature).

Constipation, which is easily managed in most patients, is the most commonly reported side effect of Calan SR

BRIEF SUMMARY

Contraindications: Severe LV dysfunction (see *Warnings*), hypotension (systolic pressure < 90 mm Hg) or cardiogenic shock, sick sinus syndrome (if no pacemaker is present), 2nd- or 3rd-degree AV block (if no pacemaker is present), atrial flutter/fibrillation with an accessory bypass tract (eg, WPW or LGL syndromes), hypersensitivity to verapamil.

Warnings: Verapamil should be avoided in patients with severe LV dysfunction (eg, ejection fraction < 30%) or moderate to severe symptoms of cardiac failure and in patients with any degree of ventricular dysfunction if they are receiving a beta-blocker. Control milder heart failure with optimum digitalization and/or diuretics before Calan SR is used. Verapamil may occasionally produce hypotension. Elevations of liver enzymes have been reported. Several cases have been demonstrated to be produced by verapamil. Periodic monitoring of liver function in patients on verapamil is prudent. Some patients with paroxysmal and/or chronic atrial flutter/fibrillation and an accessory AV pathway (eg, WPW or LGL syndromes) have developed an increased antegrade conduction across the accessory pathway bypassing the AV node, producing a very rapid ventricular response or ventricular fibrillation after receiving I.V. verapamil (or digitalis). Because of this risk, oral verapamil is contraindicated in such patients. AV block may occur (2nd- and 3rd-degree, 0.8%). Development of marked 1st-degree block or progression to 2nd- or 3rd-degree block requires reduction in dosage or, rarely, discontinuation and institution of appropriate therapy. Sinus bradycardia, 2nd-degree AV block, sinus arrest, pulmonary edema and/or severe hypotension were seen in some critically ill patients with hypertrophic cardiomyopathy who were treated with verapamil.

Precautions: Verapamil should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of overdosage. Verapamil may decrease neuromuscular transmission in patients with Duchenne's muscular dystrophy and may prolong recovery from the neuromuscular blocking agent vecuronium. It may be necessary to decrease verapamil dosage in patients with attenuated neuromuscular transmission. Combined therapy with beta-adrenergic blockers and verapamil may result in additive negative effects on heart rate, atrioventricular conduction and/or cardiac contractility; there have been reports of excessive bradycardia and AV block, including complete heart block. The risks of such combined therapy may outweigh the benefits. The combination should be used only with caution and close monitoring. Decreased metoprolol and propranolol clearance may occur when either drug is administered concomitantly with verapamil. A variable effect has been seen with combined use of atenolol. Chronic verapamil treatment can increase serum digoxin levels by 50% to 75% during the first week of therapy, which can result in digitalis toxicity. In patients with hepatic cirrhosis, verapamil may reduce total body clearance and extrarenal clearance of digitoxin. The digoxin dose should be reduced when verapamil is given, and the patient carefully monitored. Verapamil will usually have an additive effect in patients receiving blood-pressure-lowering agents. Disopyramide should not be given within 48 hours before or 24 hours after verapamil administration. Concomitant use of flecainide and verapamil may have additive effects on myocardial contractility, AV conduction, and repolarization. Combined verapamil and quinidine therapy in patients with hypertrophic cardiomyopathy should be avoided, since significant hypotension may result. Concomitant use of lithium and verapamil may result in a lowering of serum lithium levels or increased sensitivity to lithium. Patients receiving both drugs must be monitored carefully. Verapamil may increase carbamazepine concentrations during combined use. Rifampin may reduce verapamil bioavailability. Phenobarbital may increase verapamil clearance. Verapamil may increase serum levels of cyclosporin. Verapamil may inhibit the clearance and increase the plasma levels of theophylline. Concomitant use of inhalation anesthetics and calcium antagonists needs careful titration to avoid excessive cardiovascular depression. Verapamil may potentiate the activity of neuromuscular blocking agents (curare-like and depolarizing); dosage reduction may be required. Adequate animal carcinogenicity studies have not been performed. One study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. Pregnancy Category C. There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor, and delivery only if clearly needed. Verapamil is excreted in breast milk; therefore, nursing should be discontinued during verapamil use.

Adverse Reactions: Constipation (7.3%), dizziness (3.3%), nausea (2.7%), hypotension (2.5%), headache (2.2%), edema (1.9%), CHF, pulmonary edema (1.8%), fatigue (1.7%), dyspnea (1.4%), bradycardia: HR < 50/min (1.4%), AV block: total 1°,2°,3° (1.2%), 2° and 3° (0.8%), rash (1.2%), flushing (0.6%), elevated liver enzymes, reversible non-obstructive paralytic ileus. The following reactions, reported in 1.0% or less of patients, occurred under conditions where a causal relationship is uncertain: angina pectoris, atrioventricular dissociation, chest pain, claudication, myocardial infarction, palpitations, purpura (vasculitis), syncope, diarrhea, dry mouth, gastrointestinal distress, gingival hyperplasia, ecchymosis or bruising, cerebrovascular accident, confusion, equilibrium disorders, insomnia, muscle cramps, paresthesia, psychotic symptoms, shakiness, somnolence, arthralgia and rash, exanthema, hair loss, hyperkeratosis, macules, sweating, urticaria, Stevens-Johnson syndrome, erythema multiforme, blurred vision, gynecomastia, galactorrhea/hyperprolactinemia, increased urination, spotty menstruation, impotence.

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"Reflected Gray," is a 24"x30" acrylic painting that combines the sharp snap of fall colors typical of a November day with muted hues we associate with approaching winter. **Joseph Orr**, the artist, lives in Eldon, Missouri.

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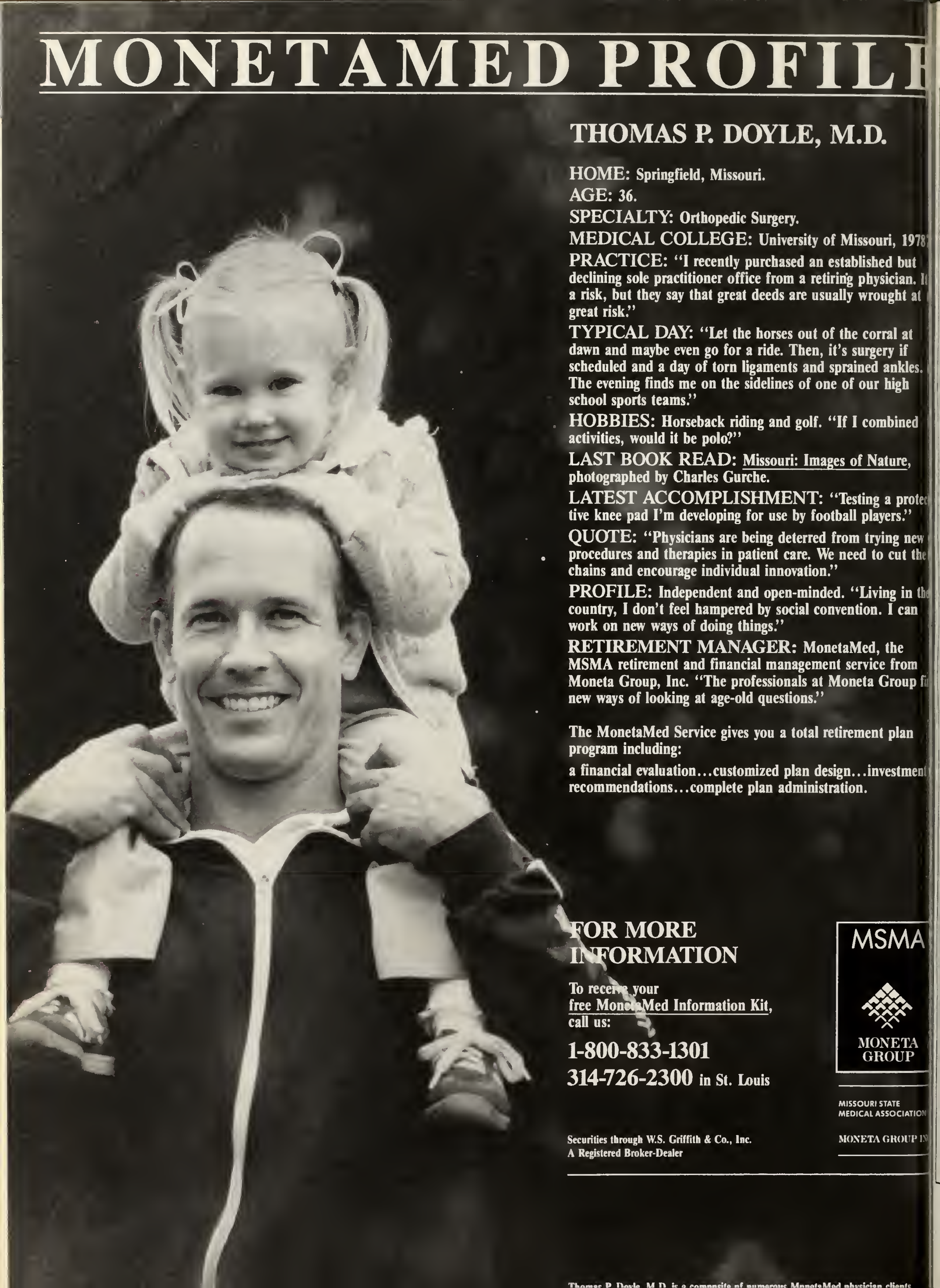

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THOMAS P. DOYLE, M.D.

HOME: Springfield, Missouri.

AGE: 36.

SPECIALTY: Orthopedic Surgery.

MEDICAL COLLEGE: University of Missouri, 1978

PRACTICE: "I recently purchased an established but declining sole practitioner office from a retiring physician. It a risk, but they say that great deeds are usually wrought at great risk."

TYPICAL DAY: "Let the horses out of the corral at dawn and maybe even go for a ride. Then, it's surgery if scheduled and a day of torn ligaments and sprained ankles. The evening finds me on the sidelines of one of our high school sports teams."

HOBBIES: Horseback riding and golf. "If I combined activities, would it be polo?"

LAST BOOK READ: Missouri: Images of Nature, photographed by Charles Gurche.

LATEST ACCOMPLISHMENT: "Testing a protective knee pad I'm developing for use by football players."

QUOTE: "Physicians are being deterred from trying new procedures and therapies in patient care. We need to cut the chains and encourage individual innovation."

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SPECIAL ARTICLE

CHANGES IN PRO REVIEW IN MISSOURI TO BE MORE EVOLUTIONARY THAN REVOLUTIONARY

by Dan Jaco, M.A., M.S.P.H.
Executive Vice President of
Missouri Patient Care
Review Foundation
Jefferson City, Missouri

Last December, the Health Care Financing Administration (HCFA) announced that the Peer Review Organization (PRO) program would be taking a dramatically new direction at the start of the next set of three year contracts, beginning in October 1991. However, beset by delays both internal and external to the agency and with first cycle PRO contracts nearing expiration, HCFA released on July 2 a final scope of work for first cycle PROs that represents more a modified third scope than a new fourth scope of work (SOW).

While the new SOW, which takes effect in Missouri on October 1 of this year, no longer requires the precertification of ten high volume procedures (as has been the case for the past three years), it does not specify the implementation date of the review and data collection methodology known as the Uniform Clinical Data Set (UCDS). In Missouri, UCDS was to have begun on April 1, 1992. UCDS is the cornerstone of the major new thrust of the program toward "outcomes."

This article discusses the major features of the just-released scope of work, with particular attention to changes that will occur in the PRO program in Missouri beginning in October. While the Missouri Patient Care Review Foundation was notified in July by HCFA that its performance under the third scope of work warranted a noncompetitive request for proposal from HCFA, it is important to keep in mind that final negotiations of first cycle PRO contracts (there are fourteen) were not completed at the time this article was prepared. Therefore, some modifications may yet result from final negotiations.

What Remains the Same?

The review process will appear very similar to physicians and providers in the Fall. Initial review will be performed by review coordinators using a combination of ISD-A, PRO-specific and HCFA-mandated generic quality screens to determine which cases are to be referred for physician review. DRG validation will continue to be done. If the reviewing physician identifies a potential problem with medical necessity, appropriateness of setting or quality of care, a letter will be sent to the physician whose care is in question, or the hospital, in the case of a hospital-specific problem. The case will then be re-reviewed with the additional information (if any) provided in response to the letter, to make a final determination. All final adverse decisions will be made by a physician who is in active practice. Final denial of Medicare payment determinations will be eligible for reconsideration; DRG changes for re-review. Final Level II and Level III quality problems will be confirmed by a committee. Scoring will remain the same: 1, 5 and 25 points for Level I, II and III quality concerns, respectively. The PRO will continue to be active in the education of beneficiaries, providers, and practitioners, if anything, more so.

Areas of Change

Case Selection. In a major departure from previous PRO contracts, HCFA will perform the actual selection of cases to be reviewed by the PRO. In the past, the PRO made the selections based on paid claims tapes (including no-pay bills) received from the fiscal intermediaries. HCFA now will draw the samples directly from a computerized file of cases processed by fiscal intermediaries and carriers, also known as the Common Working File (CWF).

In theory, this change should be transparent to providers. Based on the cases selected for a given period, the PRO will generate worksheets via its data system and advise the providers accordingly of those cases selected and whether they will be reviewed on-site at the facility or off-site at the PRO's office. However, there are still questions as to how this will work as HCFA moves into an enhanced role in the selection of cases for all PROs.

The other dramatic change in case selection involves the way in which the samples are to be drawn. Presently, inpatient samples are facility-specific; now, a 15% random sample will be drawn in Year 1 from a national beneficiary universe. (In Year 2 and 3, it drops to 10%.) It will be difficult to predict the volume of cases to be reviewed in any given facility until sufficient experience has been gained with this new approach. However, preliminary analysis indicates that large facilities will experience close to a 15% random selection rate during the first year of the new contract, while selection rates for smaller facilities may fluctuate above or below that rate.

Similarly, the overall volume of inpatient review in the state is difficult to predict with any degree of precision. The number of selection categories, other than the 15% random sample of beneficiaries, has been reduced considerably. Nevertheless, higher than random sampling levels of cost and day outlier cases (25%), DRGs 468 (50%) and 472 (100%), combined with intensification selections in facilities that exceed HCFA-established error-rate thresholds, will bump the overall percentage above 15% and could approach the current percentage of inpatient cases being reviewed (18-20%) in year 1 of the new contract.

On the ambulatory surgery (AS) side, HCFA will decrease the size of the random sample from 5% to 3%. These samples will continue to be facility-specific. However, with the elimination of all but the assistant at cataract portion of the precertification program, cases previously excluded from the universe of AS cases to be reviewed will now be subject to sample selection on a retrospective basis. The net effect will be only a slight decrease in the total volume of AS cases to be reviewed retrospectively by the PRO.

Figure 1 contains HCFA's summary of the categories and percentages of cases to be reviewed in each category in the next contract.

Figure 1

Proposed Sampling and Levels of Review For Fourth Contracting Cycle

Review Sample	3rd Scope of Work Reveiw Level	4th Contracting Cycle Review Level	Change In Effort
Random Sample	3%	15% Beneficiary Specific	Increase
Preadmission	100% of 10 procedures (cataract & Carotid endart.)	Eliminated for other than assistant at cataract	Decrease
Transfer (PPS to PPS)	50%	Eliminated	Decrease
Transfer (PPS to Psych)	10% Random All ICD-9-CM 290-319 All Non-Psychiatric Codes	Eliminated	Decrease
Transfer (Swing bed)	25%	Eliminated	Decrease
Readmissions	25% Random Sample of all less than 31 days	Eliminated Reviewed as part of random sample	Decrease
Medicare Code Editor (for certain diagnoses)	100%	Same	None
Hospital Adjustments (higher weighted)	100%	Same	None
FI Referrals	100%	Same	None
DRG 468 (Unrelated Operating Room Procedure)	50%	Same	None
DRG 462 (Rehabilitation)	25%	Eliminated	Decrease

Revisions to Quality Review. In many ways, this process will be similar -- use of HCFA-mandated generic quality screens, a 30-day response time for physicians/providers to potential quality issues, definitions of severity levels, prescribed interventions based on weighted scoring and committee determination of final severity Level II and III cases. But there are four new wrinkles planned in the process.

One of the most notable changes is the assignment of confirmed problems to interns and residents. In the current SOW, the attending physician is held accountable for quality problems resulting from the care rendered to his/her patient by an intern or resident. In a teaching environment, this creates a disincentive for a seasoned physician to take a developing physician "under his wing." HCFA is therefore changing the assignment of the quality issue thusly: "If an intern or resident is determined to be the source of the problem, the PRO shall treat him/her like any other "physician"...If, however, the intern or resident (or any other physician) signs a statement on a given case abrogating his/her right to confidentiality, the PRO may notify the hospital of the potential quality concern and offer an opportunity to discuss."

A second significant change in this area of the SOW relates to thresholds for intensification which could affect smaller, rural hospitals in particular. For facilities having ten or fewer reviews completed by the PRO in a quarter -- but where at least one denial occured -- review would be intensified to 100% in the next quarter. Orginally, this included one Level II confirmed quality problem as well. Offsetting some of the impact of 100% intensificiation would be a third and related change: HCFA has capped the intensification in this situation to be 100% or 100 cases whichever is less.

Finally, there are revisions to the handling of a pattern of pended Level I quality concerns. Currently, if a physician has three or more pended Level I cases in a quarter, the PRO must evaluate those cases to determine if any should become final Level I's. If at least three confirmed problems result, the points are to be assigned to the physician for purposes of weighted scoring and potential intervention, with an accompanying notification to the physician. Recognizing that this approach fails to take into account the variation in patient volume among physicians and providers, HCFA has proposed a more graduated approach as shown in Figure 2.

While this does not address entirely the concerns expressed by the physician and provider community during the third SOW about adjusting for patient volume in the assignment of weighted severity scores, it is an improvement over the current system.

Profiling.

Profiling is a computer-based management technique used to monitor patterns of care, both in the areas of quality assurance and utilization. The Foundation already makes considerable use of profiling in trying to assess where potential problem areas may exist, whether they be across or within providers, by physician, DRG or any other meaningful category of analysis.

HCFA is now proposing that PROs make even greater use of profiling as part of the next SOW. The underlying basis for this change is to shift the focus for assessment of medical practice from individual occurrences of care to patterns of care. In the long run, this approach is thought to facilitate a more positive relationship between PROs and physicians.

It is important to recognize that profiling is not an end in itself. The fact that a pattern is identified that deviates from an "expected" outcome is not synonymous with identifying a problem. In the short run, it is a basis to focus PRO review in areas where problems may be occurring. On the other hand, deviations from the norm may also help to identify patterns of cost-effective care in the state that, if adopted elsewhere, would positively affect the overall delivery of medical care in the state. If, for example, a condition which normally requires a 5-6 day stay is being effectively and safely treated in one area of the state or in one institution with no more than 2-day stay, is there an actively practicing physician in the state who would not want to know that?

Therefore, the analysis of profiles begins the process of looking at patterns of care and generating dialogue among the physicians in the state about what works best. As such, it builds toward a more educational and less punitive relationship between the PRO and the physician community, while helping to improve the quality of patient care. Once UCDS, with its wealth of clinical information, is adopted, the educational potential will be even further enhanced.

Figure 2

THRESHOLD FOR TAKING CASES OUT OF PENDING STATUS

Completed Reviews Per Quarter For Problem Source	Threshold Per Quarter	Threshold Per Biquarter
1 - 50	3 Cases	4 Cases
51 - 99	6 Cases	9 Cases
100 - 299	9 Cases	15 Cases
Over 300	12 Cases	18 Cases

Other Changes.

Lastly, there are three other changes of significance that will or could impact physicians and hospitals.

First, the PRO will be required to perform review of Medicare HMO care in the state. This presently affects only the Kansas City area, namely, Total Health Care and Humana Gold-Plus (formerly Prime Health), with the review focused entirely on quality. While HCFA plans to revamp PRO review of HMOs in the next year, the present SOW, labeled by the HMO industry as too burdensome, will continue to be employed. Notable here as well is the proposed legislation by Senator David Durenberger (D-MN) that would alter the oversight of HMOs by the federal government.

Second, under the new SOW, PROs must intensify review -- at the 50% level in the next quarter -- of any physician on whom the state licensing board has taken disciplinary action and so notified the PRO.

Finally, HCFA is changing the way in which PROs are to be reimbursed under these next contracts, largely in anticipation of the implementation of UCDS. Instead of fixed price contracts, PROs will be paid beginning with the next SOW on a cost reimbursement basis. The primary purpose of this approach is to reduce the financial risk of a PRO under the uncertainty of a largely untested review methodology (UCDS). While the means by which a PRO is paid may be transparent to providers in terms of the review process, it does have the potential to impact the program. HCFA will be scrutinizing much more closely the way in which PROs expend funds and resources. What, if any, impact it will have remains to be seen.

Closing Comments

HCFA has very clearly indicated its continued support of the UCDS approach to review and intent to modify first cycle PRO contracts at some point during the new three-year period to incorporate UCDS. The likely implementation date for UCDS in Missouri, based on what is currently known, is at least a year away. The Foundation will keep the physician and provider community apprised of developments in this area.

Through all these changes, it bears reminding that the Missouri Patient Care Review Foundation is a physician-sponsored organization, dedicated to the improvement of patient care in the state. As an organization that has always placed a high premium on educational over punitive approaches with physicians and providers, we look forward to seeing that process hastened both at the state and national levels.

(The author wishes to thank the following persons who critiqued this article: Ralph Smith, M.D.; Ann Matteson, R.R.A.; Barb Stutts, R.N.; Susan Elder; Cathy Athon; and Benny Gruber, of the Health Care Financing Administration, Region VII office.)

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Missouri State Medical Association

Guest Editorial

by Wilfred E. Wooldridge, M.D.

GERIATRIC SUICIDE. A PATTERN SHIFT?

From medical school days to the present I have always been told, "Never underestimate threat of suicide." I didn't, and sometimes my intervention in arranging medical help paid off. At least, there are several people still around who voiced suicide to me as a way out of seemingly insurmountable problems.

I wonder if there isn't some present shift in ages of those contemplating suicide. As well as the regrettable numbler of younger people are we now seeing more elders?

Even though a dermatologist, and not as often involved in such critical situations as many of my colleagues, a practice of mine has always been to listen when a patient wanted to talk about some deep concern. That, together with the fact I am third generation in my town, acquainted with or related to a considerable number of my patients, makes me think I am somewhat qualified to sense a trend in our society.

There may be a changing pattern in suicide, in that geriatric individuals become more likely candidates. Increasing longevity and dependence on medical care are factors. Most of all, however, is the depression occasioned by loneliness and despair.

The pattern in these suicidal elders has been remarkably the same; not some major health crisis nor declining health in general. That is forseeable, and they seem able to deal with that as an inevitable consequence of age. Instead, there has been an enveloping black depression incompatible with wanting to live. Let's look at a few of these patients.

John was a 80 year old Ozarkian, a farmer who lived within ten miles of where he was born. By raising a huge garden, and going to town only for necessities, John had carved a living out of eighty acres of rocks, reared two children and two grandchildren when their mother died young. If you know Ozark hills like I do, that was no mean achievement.

John's wife grew old along with him. They lived in a small home just off the highway and I would have thought were happy.

One day I received a letter from John, scrawled in pencil on notebook paper. It said, "Dear Doc, Come and see me. I'm sick."

It was sixty miles to John's place, but I had gone there quail hunting with my sons many times and I thought I owed John this one. The next Sunday afternoon my wife and I drove partway down where I let her off to visit friends and went on by myself. I was met at the door by his wife. "I don't know what's wrong with him," she said. "He won't eat and just sits around looking at the floor."

"I'm no good anymore," John complained, "I can't make garden or put out a crop. I give out. I guess I've had it."

I visited with John quite a while, reminding him how lucky he was to have such a good wife and a granddaughter nearby. After a while he even smiled a time or two and guessed he was just feeling sorry for himself because he was getting old.

About three months later I received a second letter. It said, "Doc, I sure wish you would come and see me again."

That time I sent a note that I would come as quickly as I could but I had family visiting me for the holidays and it would be a while.

Two weeks later John was dead. He sent his wife to the nearby town for groceries and shot himself while she was away.

Then there was Alameda. She was the widow of a country fishing buddy, long since gone. She was almost eighty. For no reason I could fathom at the time she came to the office in a thoroughly dejected state. Fortunately, it was late in the afternoon when I could let her talk.

Although she lived in a small apartment in a low-cost housing complex she felt neglected because she had no friends left.

"Doctor," she said, "I've served my time. My son

GUEST EDITORIAL

Continued from page 743

lives in Oregon and can't get home often. He and his wife don't want me there and, anyway, I don't want to move this late in life. I can take care of my life, but what kind of a life is it? I just don't care to live."

Again, I gave my little speech. She had her church. She had neighbors in her building and the Lord had been kind in granting her better health than most her age. She left, looking as dejected as before. Three days later someone smelled gas as they passed her apartment. She was dead.

Next was Martha, not as old but alone and somewhat feeble for her age of seventy-two. She received good medical care for her heart problem. Again a widow, she lived by herself in a small house near one of our hospitals. On infrequent occasions, when I had a spare moment, I would stop in and see her because she had been a friend of my parents.

The story was about the same. "I just don't care to wake up in the morning because every day is like the one before. There's no pleasure in any of them unless somebody like you stops by once in a while," she said mournfully.

I tried to encourage her and left, thinking I would talk to her minister and see what he could do about arranging some kind of attention for her. I never had time to do it before I noticed her obituary. When I inquired I found she had taken an overdose of her medication, and I knew why.

So, is this so unusual? I suppose not, if viewed as single instances but there has been such a surge of these in my experience of the past few years that I began inquiring of medical friends who regularly care for large numbers of our elderly. They agree there is a sharp upswing in geriatric suicides.

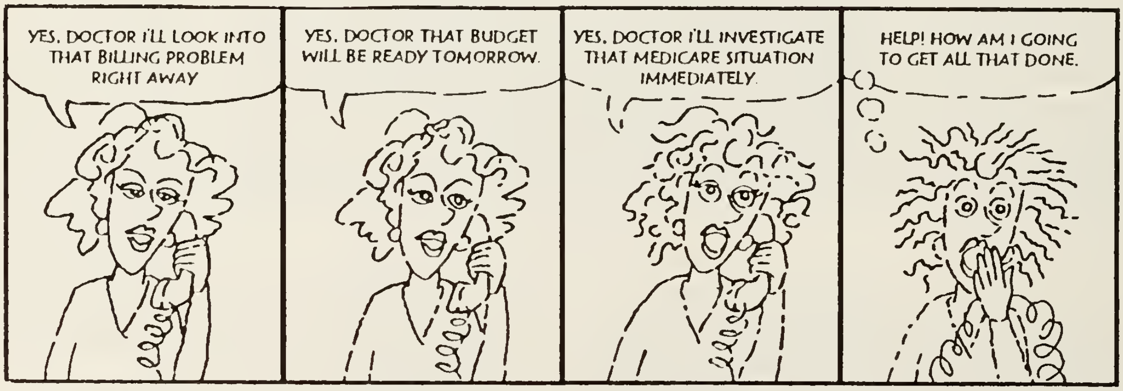
In an editorial I wrote back in the seventies I said, "Medical progress in this generation has been remarkable, but it has created an immense problem in society because it has prolonged life without postponing senescence."

The people, who's histories I have related have been victims of that problem. Economically they could still make it. They certainly were not senile in the psychological sense. They could function and reason satisfactorily. As nearly as I have been able to diagnose them they simply felt it was all behind, nothing ahead and, on that basis, life wasn't worth it.

Is this trend to continue? I suspect it is and, if those lonesome oldsters live even longer, we have even a greater problem. What can we do? Probably the answer is not a medical, but sociologic one and it's going to be tough.

But, for now, don't take depression and the threat of suicide lightly in one of your older patients. The possibility may be very real.

Editor's Note: *The author is an Emeritus Clinical Professor of Medicine (Dermatology) at the University of Missouri-Columbia.*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EDITOR'S DESK

by Donald G. Sessions, M.D.
Editor

The Quandary of New Technology

Almost everyone I know gets a stuffy nose every once in a while. Add to that a headache and some pain in the face and you probably have a very common condition-sinusitis. It is usually caused by obstruction to the flow of mucus which is put out by the membrane lining of the paranasal sinuses and the nose in response to a stimulus to its respiratory epithelium. The obstructed mucus creates pressure on the sinus lining, presumably resulting in irritation of pain fibers. With stasis comes bacterial overgrowth and resultant infection. Classical treatment has been aimed at handling the infection with antibiotics and calming down the mucosal reaction with medications including decongestants, antihistamines, and topical steroids. Most patients will respond to this conservative regimen with defervescence of their symptoms. Most knowledgeable clinicians warn their patients that their relief might be short lived. A very large number of patients have recurrent upper respiratory symptoms indicative of chronic sinusitis.

In recent years new technology has impacted on the diagnosis and treatment of sinusitis and has raised some interesting practical issues. Patients with severe symptoms who have not responded to standard medical therapy usually undergo coronal CT scan of their sinuses. This has replaced the standard 5 view sinus series of plain films, which was always difficult to read at best and was only really valuable for fairly advanced diseases. Coronal CT of the sinuses allows us to view each of the sinuses with a clarity that can indicate how much membrane thickening there is in millimeters. The use of the these films is a major technical advance. Several scientific studies have been published indicating clear superiority of the scans in comparison to the plain films. Charges for the CT scan of the sinuses are more than twice that of a routine sinus series and more than three times the cost of my initial office visit.

In recent years sinus surgeons have employed a new technique to improve the natural drainage of the paranasal sinuses. Originally called Functional Endoscopic Sinus Surgery (FESS) and now more commonly called Endoscopic Sinus Surgery (ESS), it is a transnasal approach in which anatomic areas of the lateral nasal wall are viewed through an endoscope and using a new set of instruments, openings are made into the ethmoid and maxillary sinuses as well as sometimes into the sphenoid and frontal sinuses.

New technology like this has created some very interesting problems. Word of the procedure has become commonplace in the newspapers and on health programs of network television. This has precede basic clinical research studies which might be used to standardize diagnosis, therapeutic procedures, and outcome measurements. There is definitely a learning curve for these techniques. The anatomy can be extremely challenging since these sinuses are separated from the orbit by the lamina papyracea (the paper thin plate) and from the anterior cranial fossa and the dura of the frontal lobe of the brain by the cribiform plate of the ethmoid (a thin plate of bone pierced by multiple branches of the olfactory nerve). Increasingly, reports of complications have appeared in the literature. Some patients have had a cerebrospinal fluid leak and meningitis. There are isolated reports of blindness after this approach.

There has been an expanding pressure by a symptomatic and partially educated public and from certain portions of the medical community to utilize this modern approach to sinus disease. In view of the tremendous number of patients with both serious and bothersome sinus symptoms it is understandable that hospitals are enthusiastic about purchasing sets of endoscopes and the special instruments so that their patients can be treated with

> **"Contemporary limits seem more likely to be decided by insurance companies, the government, or the courts."**

this new technology. The response from sinus surgeons has been predictable. Practical courses in ESS are overbooked. The "experts" giving the courses seldom are the ones with the "bad" complications. A training experience that might have taken a year or more is telescoped into a week-end using one shared cadaver. A certificate of attendance is usually issued and is often all that is necessary to obtain local hospital privileges back home.

As might be expected there can be more than pure altruism and the desire to stamp out sinus disease in the rush to become trained in ESS. The opportunity to use new technology is often accompanied by justification to increase charges. At a recent national meeting the Ethic Committee discussed many of the issues caused by trying to collect for new procedures for which there are no CPT code numbers. The committee discussed complaints which had become to its attention regarding creative unbundling of operative fees resulting in charges which were sometimes more than 200 to 300 percent higher than charges for more standard pre-ESS procedures. Without question the new approach to the sinuses have multiple advantages over the previous standard procedures, but is it appropriate to charge more for them than to remove a laryngeal cancer or a brain tumor?

Another issue brought up is the problem of who should decide the basis for limiting and standardizing these new procedures. In the past the innovators of the techniques usually pushed them to the limits and then reported to the medical public at meeting or in the literature. Contemporary limits seem more likely to be decided by insurance companies, the government, or the courts.

For example, I have a large group of patients with severe sinus symptoms which are responsive to medical therapy. They are asymptomatic when on treatment but as soon as they stop taking their medication their symptoms return. Before ESS was a treatment option I would have suggested that these patients should just resign themselves to taking medicine indefinitely in order to stay symptom free. Most patients in this group have no abnormality on examination and the appearance of normal sinuses on CT scan. My recent experience has been that ESS has been successful in allowing these patients to get off their medications without a recurrence of their previous sinus symptoms. This, of course, brings up the issue of whether it is appropriate to do elective ESS surgery for symptoms despite there being no "objective" signs and in the presence of a normal CT scan. Insurance companies are already taking an adversarial role here.

The answers to most of these questions will eventually be revealed through standard and rigorous clinical studies. In the meantime we'll keep trying to stay current with new technology, and do what's right for our patients, and do as little wrong to them as possible.

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by Mary Hunkeler, MSMAA President

A Precious Freedom

Through the years Thanksgiving Day has become the day Americans set aside to gather with family and friends to give thanks for the blessings of their lives.

The Pilgrims and Indians of Plymouth, Massachusetts never knew they may have begun the phenomenon of voluntarism in 1621 in America.

That first Thanksgiving grew out of their mutual survival of a terrible winter and the celebration of an abundant harvest in the summer that followed. They survived and celebrated by giving of themselves to the needs of one another as we do in the auxiliary today. Through their sharing and giving grew love and understanding - the essence of volunteering.

During his years as president, Ronald Reagan spoke of how valuable voluntarism is to the American way of life.

"Our way of life, and our tradition of neighbor helping neighbor, are only possible because of our unique American system . . . a precious freedom that ensures individual volunteer action, people freely working together to help each other.

"And in every instance, from the board rooms of corporations to the waiting rooms of human service agencies, it's the individual volunteer and the basic voluntary act that exemplifies our responsibility and caring for our fellow man. Most of these people aren't famous . . . you probably wouldn't recognize them if you saw them. They're just everyday Americans. But make no mistake, they're heroes . . . real American heroes.

"Our nation will not be measured as much by its power or wealth, as by the simple generosity and sense of justice of a people who believe in the freedom and dignity of each individual. As anthropologist Margaret Mead once observed, 'If you look closely, you will see that almost everything that really matters to us, anything that embodies our deepest commitment to the way human life should be lived and cared for, depends on some form . . . more often many forms . . . of voluntarism.'"

"But make no mistake, they're heroes . . . real American heroes"

I wish you Happy Thanksgiving as you gather with family and friends. May you find much to be thankful for and receive abundant thanks for all you give to loved ones, to patients, to community and to medicine. ■

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by Dorothy D. Reister, M.D.
MSMA President

What Is Happening To Medicaid? Read And Write Congress.

The never-ending cuts in Medicaid are continuing. Missouri was to have about 2.8 million dollars specifically designated by the Feds to Missouri for pediatric coverage, but Governor Ashcroft could not find the matching funds so the money was returned. Missouri physicians are paid about $0.28 on the $1.00 charges. Even Kansas does better than that! Whether you are a physician who sees Medicaid patients or not, this is an appalling situation for this state. Many southern states do much better than we. What it indicates to me is the very low degree of concern that is shown by our state government for the truly needy of our state. Many of us have quoted these figures to state officials, but no one seems to be listening! We have found that with enough out-pouring of complaint from incensed and embarrassed physicians and other citizens, we can make a difference. If each one of us writes his legislator and state officials they will realize how the citizens of this state are being ignored.

How else can we plead our case? The nursing homes in Missouri took the Department of Health to court and WON. The Missouri Hospital Association threatened to sue and it was settled out of court. This is probably the time to join with the Missouri Association of Osteopathic Physicians and Surgeons and do the same thing. By joining forces we present a united front of caring physicians. The two associations will be meeting in early November to discuss this among other matters; it MUST be a united effort.

Meetings have been going on to formulate our own "Access" plans for the state. Again this will be something in which everyone must share the financial problems and responsibility. Ours has become such a give-away society with no thought to individual responsibility; there will be hard decisions to make and to implement.

Our Risk Management program is being pursued and we'll keep you informed. Again this means we look at ourselves and our profession the tough way. Some of you have heard that in Colorado if your handwriting is illegible, you go to class every Tuesday night with Dr. Robert Britain in Denver until your writing is legible. This is one of the correctable reasons for liability cases being filed.

The situation with the State Board of Healing Arts has not improved appreciably. Their executive secretary said at Council Meeting in August that "The Board is basically a consumer protection board". He meant that by their licensing and disciplining actions they are protecting the consumers of the state. But who is protecting the physicians from prolonged hearings and unrealistic rulings? We all admit there are some "bad apples", but our legal system is based on the premise that we are innocent until proven guilty. The way the board works it makes us wonder. Of course the members of the board have a difficult job to do, but surely there is still some sense of justice and fair play there.

Some of us are heading for Washington, D.C. for two days of intensive political meetings with

> **"Ours has become such a give-away society with no thought to individual responsibility; there will be hard decisions to make and to implement."**

President's Page

continued from page 749

our Senators and Congressmen. We go to represent all of you - members of the Missouri State Medical Association or not. We go also to represent all physicians whether members of the Political Action Committees or not. Letters and personal contact are the best ways to educate the Congress and they obviously need some education on health care issues. Then the American Medical Association meets the first week of December.

My position has given me a chance to meet many more of you and it makes me identify with Charles Kuralt - "On the Road Again". So, get those contacts with legislators and speak up for the under-served healthwise. We are our patients advocates and believe in the best health care possible. We must see that Missouri has the money to do it and perhaps postpone some of the frills for which money has been appropriated.

HEALTH CARE FOR MISSOURIANS MUST IMPROVE.

PUZZLE:
(1) Name the five five-star generals of the USA.
(2) Do you remember the reason the blonde was fired from the M&M factory?

LETTER TO THE EDITOR

Jordon W. Burkey, M.D.
Missouri Medicine
P.O. Box 1020
113 Madison Street
Jefferson City, Missouri 65102

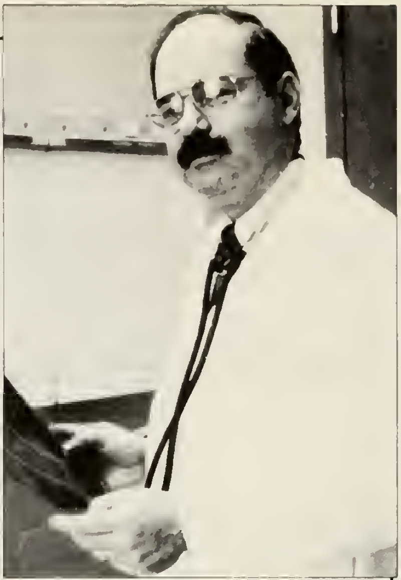
Dear Dr. Burkey:

I read with interest your recent article from the Editor's Desk in the *Missouri Medicine* and recognize the potential frustration associated with trying to keep up in pharmacology while facing the professional challenges, supervising an office, filling out forms, staying abreast of new laws, etc. etc. On the other hand, I must admit that I have offered to provide such an update on various topics in pharmacology to physicians in both Missouri and Illinois without much interest shown on the part of the physicians. I have spoke with some regularity to the staff of the Chester Memorial Hospital in Chester, Illinois, but all other offers have landed on deaf ears. My job, as a pharmacologist, is to keep up with these advances. I am not associated with any drug company and will tell you exactly how I feel about any drug product. Many programs presented at meetings are "Company" sponsored, so you get a biased view of the topic.

I will enclose a copy of my resume and would ask that when you hear physicians talking of the need for quality continuing education in pharmacology, give them my name and phone number. If my schedule permits, I would be happy to make a 30 to 45 minutes presentation at a meeting for expenses.

Sincerely,
Leonard L. Naeger, Ph.D.

P.S. Point #5, page 624 - In Missouri, you can write the trade name of the drug on the prescription, sign it on the left of the prescription blank, and the pharmacist has the right to dispense a generic product.



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PRACTICE MANAGEMENT

by Janice K. Woerth, Ph.D.

Dear Dr. Woerth,

We have a difficult time coding for injections. Could you explain how injections are properly coded?

Dr. P.N.

Dear Dr. P.N.,

There are several ways to code for injections, depending on the type of injection and whether the patient is a Medicare patient or not. If your patient is a Medicare patient and you are giving a therapeutic or diagnostic injection, you need to use the HCPCS Level II and III codes. The HCPCS codes are available through your Medicare carrier and were most likely sent to your office in February of this year. The J-codes section of HCPCS codes is an extensive listing of generic drug injections, including chemotherapy. These codes begin with the letter J and are followed by four numbers. For most J-codes, the mg/cc dosage of the drug is listed as part of the code. An example of a J-code is code J0990, Demerol HCL, up to 100 mg. Medicare requires use of these codes because they are more specific than the injection codes found in CPT.

If you are giving therapeutic or diagnostic injections to non-Medicare patients, you use the codes 90782-90799 found in the CPT book. for a Medicare patient receiving a therapeutic or diagnostic injection for which no J-code can be found, use CPT code 90799, unlisted therapeutic or diagnostic injection. With this code, you also must indicate the method of administration, i.e. intramuscular (IM) or intravenous (IV) and the complete name of the drug and dosage. Since therapeutic and diagnostic injections are generally given in the course of an office visit, the appropriate level of office visit should be coded in addition to the injection code. If no office visit is given, then only code for the injection.

When coding for allergen immunotherapy, use CPT codes 95115-95199 for all patients including Medicare patients. The CPT instructs the coder to use office visits codes only if other identifiable services are rendered along with allergen immunotherapy.

Immunization injections, whether your patient is a Medicare patient or not, are coded from the CPT book using codes (0701-90749. The CPT notes that if the immunization is not given in conjunction with another medical service a minimal office visit (90030) should be billed along with the immunization code. I have found that many offices fail to bill for this minimal office visit when giving immunization injections and are consequently losing several thousand dollars a year in revenue.

When coding for any patient requiring infusion therapy, excluding chemotherapy, use the CPT codes 90780-90781. These codes stipulate that a physician must be present during the infusion.

Finally, for coding chemotherapy administration, use CPT codes 96400-96549. These codes are only for chemotherapy administration and do not include other services rendered or the drug administered. For Medicare patients, use the appropriate J-code to specify the chemotherapy drug given in addition to the appropriate chemotherapy administration code. For non-Medicare patients, use code 96545, provision of chemotherapy agent, specifying the drug used, along with the appropriate chemotherapy administration code.

Do you have a question for Dr. Woerth? Include your questions along with your name, address and phone number and send them to:

JANICE K. WOERTH, pH.d.
c/o *Missouri Medicine*
P.O. Box 1028
Jefferson City, MO 65102
or call her direct: 202/363-1780

Although your name will not be used in the journal, please include your name and phone number so that Dr. Woerth may contact you if she needs additional information to answer your question.

Dear Dr. Woerth,

My Medicare patients are very confused about their financial obligations to the physician that accepts assignment. Patients do not believe my staff when they are told that they are required to pay the 20% copayment when I accept assignment on their Medicare claims. Have you any suggestions as to how I can politely and effectively convey this message about copayment to my patients?

Dr. I.D.

Dear Dr. I.D.,

The U.S. Department of Health and Human Services publishes a booklet entitled, The Medicare Handbook, that contains just the information you need. This publication, available free of charge from your local Social Security office, is written for patients and explains the scope of part B Medicare coverage. I highly recommend it for all my clients. There is a section entitled, "The Assignment Method", that explains to the patient their financial responsibilities when their physician accepts assignment. I suggest you get a copy of The Medicare Handbook and either read this section to your patients or have them read it form themselves. Medicare patients are sent this book each year but I have found that few ever read it.

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SPECIAL ARTICLE

by George M. Bohigian, M.D.
St. Louis, Missouri

The Future of American Medicine: The Problems, Solutions and Predictions

The national debate on health care will be the number one domestic issue in the 1992 elections. The pressures of rising medical cost have placed this issue at the top of the nation's political agenda.

The US health care system is unsurpassed in the world. The elite of other nations come to the United States for their health care needs and training. At the same time, the system is costing too much and excluding too many people. Three major obstacles are standing in the way of significant reform: federal budget constraints, absence of political consensus, and the power of key interest groups to block unacceptable proposals. During the last several decades, the United States has moved toward a more centralized and socialistic attitude on domestic issues, while other countries have experimented with free enterprise. The manner in which this country deals with health care issues will be the test case on how we deal with other domestic issues.

THE PROBLEM

There is a perception of a crisis in health care in the United States. In a recent Gallup poll, 91% of those questioned felt that there was a definite crisis in health care. Eighty-five percent believe that the American health care system needs reform.

- Thirteen percent (or 33,000,000) of the US population is uninsured or under-insured.
- Twenty-one percent of children under the age of 15 have no health care insurance.
- Infant mortality is one of the highest in Western countries, even excluding stillbirths.
- In 1990, health care represented 12% of the gross national product, (defense was 6%, and education was 6%).

Although there is a consensus that our society must provide basic medical/health care for all, we seem to be unable to form an agreement on the means to accomplish this goal.

We must ask ourselves if we have the national will and the leadership to devise a system that incorporates three generally accepted principles for a universal system of health care insurance.

1. Every American has a right to medical care. 2. Every provider should receive reasonable compensation. 3. All Americans should contribute to support a system according to their ability to pay.

THE SOLUTIONS

There are four scenarios for the future health care system in the United States. (see Figure 1)[1]

1. **Incremental change** (micro-economics) - this is the current system with slowing creeping controls; which can eventually lead to expansion of Medicare benefits to all age groups.
2. **Continuation and expansion of an employer based system with universal access.** This would require the establishment of risk pools for the unemployed to be funded by some type of new tax.
3. Consumer choice - with the consumer being the primary decision maker in terms of buying health insurance. Medicare recipients would be given Government-issued vouchers and health care plans could accept them if they met federally mandated guidelines. Employers would be out of the insurance business.
4. **A single payer system**, often called the Canadian system, or National Health Insurance, is similar to

Figure 1

CURRENT PROPOSALS TO REFORM THE U.S. HEALTH CARE SYSTEM

Universal access, employer-based system:	Consumer-choice:	Single-Payer:
Kennedy/Waxman bills	Enthoven/Kronick	Physicians for a National Health Program (Canadian-type system)
American Medical Association	The Heritage Foundation	Organized labor (national health insurance)
National Leadership Commission		UNY Care, New York
The Pepper Commission		California Ballot Initiative, 1992
State Initiatives to Improve Medicaid coverage such as those in Massachusetts and Oregon.		American College of Physicians
		Russo Bill

proposals in other western countries. The Russo Bill, currently in Congress, is one such example.

The AMA Health Access Plan and the Pepper Commission (Democratic Party's plan) are similar. They are based on health care provided by employers; with benefits being mandated by Federal guidelines. Those unemployed would be cared for by a risk pool with state and federal money similar to Medicaid. This type of plan preserves the plurality of our present system, allowing competition to work in the health care marketplace. There are definite disadvantages to each of these proposals. (see Figure 2)[2]

THE COMING REVOLUTION

Health care is about to undergo a fundamental change, if not a revolution. This change will take place before many physicians realize it, leaving few able to respond. The physicians will continue to be apolitical, aloof, and fragmented. Physicians are their own worst enemies. The typical physician, in his true entrepreneurial and goal-oriented character, will work harder and longer, but events will move too quickly.

Figure 2

RATING HEALTH CARE VALUE; IS ONE SYSTEM BEST?			Health Measures Better.......Worse 1 2 3 4 5			Satisfaction (see key) Most Satisfied..........................Least Satisfied A= 50%+ B=49-40% C=39-30% D=29-20% F=20%-							
Country	$ PER CAPITA	$ AS % OF GNP	INFANT MORTALITY	INFANT IMMUNIZATI.	LIFE EXPECTANCY	TECHNOLOGY	CONTROL	QUALITY	WAITING TIMES	ELECTIVE SURGERY	PERSONAL EXPENSES	EQUAL CARE	OVERALL
Canada Compulsory public insurance; wide spread supplementary private insurance.	1554	8.5	3	3	1	B	A	A	A	C	A	A	A
Germany Compulsory public or private insurance.	1212	8.6	2	3	3	D	D	C	C	D	D	D	B
Great Britain Compulsory public insurance; limited supplementary private insurance.	795	5.9	3	4	4	C	C	C	B	D	D	D	C
Japan Compulsory public insurance; limited supplementary private insurance.	978	6.7	1	3	1	F	F	F	D	F	F	D	F
Sweden Compulsory public insurance; limited supplementary private insurance.	1328	9.0	2	1	3	D	D	C	D	D	C	D	D
United States Voluntary private insurance; 13 percent uninsured; public insurance for the poor (comprehensive) and elderly (limited).	2951	11.2	5	5	5	A	A	A	A	A	B	C	A

Key to the satisfaction rating:
Technology: Being able to get the most advanced tests, drugs, medical procedures, and equipment. Control: Having enough personal control over decisions affecting your own medical care. Quality: Receiving health care of the best possible quality. Waiting Times: Not having to wait too long to get an appointment to see the doctor once you call. Elective Surgery: Being able to get elective surgery - that's surgery for conditions that aren't immediately life-threatening - promptly with much delay. Out of Pocket Expense: Minimizing your personal out-of-pocket costs for health care. Equal Care: The opportunity for everyone to receive top quality health care regardless of their income. Overall: Overall satisfaction with the health care available to you and members of your household.

Figure 3

HIGHLIGHTS OF THE AMA/PEPPER/WEST GERMANY PLANS

AMA

Expanded Medicare/Medicaid program to cover everyone below the regional poverty level with a package of benefits that is uniform across the country.

Increased employer provider private insurance for two thirds of the uninsured who are employed; tax credits to small businesses.

Risk pools in place in each state to cover the uninsured.

Catastrophic coverage with basic benefit package.

PEPPER

Employer/employee premium sharing.

Replaces Medicaid to poor and non-worker.

WEST GERMANY

Compulsory insurance.

Financing through payroll tax plus tax on social security pensions plus income-based tax.

PREDICTION

It is my prediction that the AMA/Pepper Commission proposal, (see Figure 3) which is similar to West Germany's, will be the best *practical* solution. Unfortunately this may not be the most expedient *political* solution. The political solution will be a universal one payer system as in Canada. In the last Missouri House of Representatives session, a Canadian-style bill was nearly passed into law. It failed by only nineteen votes with 163 members voting. This system, or any other national health insurance prescription, would be deadly. It would saddle our economy with billions of dollars in taxes while endangering world-class research, free choice, and access to an abundance of top quality providers that are the hallmarks of our system. This system will have all the heart of the IRS and the efficiency of the postal service. I predict that we will be faced with this reform in the mid-nineties.

A national health care system of "free" medical care will quickly outrun any funds provided for it. Eventually, societies will return to a free enterprise system to repair the damage caused by socialism. The immediate answer to this national problem would be for the medical, business, and political communities to work together on a united solution that benefits everyone.

FURTHER SUGGESTED READING

1. *Journal of the American Medical Association, Vol. 265, #19, pages 2437-2624, May 15, 1991. (Figure 1)*
2. *Harvard Community Health Plan Annual Report, 10 Brookline Place, Brookline, MA 02146. (Figure 2)*

Editor's Note: Dr. Bohigian is a Missouri delegate to the AMA, in private ophthalmological practice, and a Professor of Clinical Ophthalmology at Washington University/Barnes Hospital, St. Louis.

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References:
1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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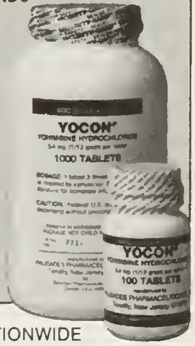

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PULSE OXIMETRY IN EVALUATION OF OXYGEN NEEDS OF PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)

Vijay Chechani, M.D. and Gary Scott, RRT, MEd.
Columbia, Missouri

The benefits of oxygen therapy have been demonstrated in chronic obstructive pulmonary disease (COPD) patients with PaO_2 less than 55 torr and in patients with PaO_2 55-59 torr with evidence of polycythemia or right heart failure.[1,2] According to the recent recommendations of the third consensus conference on long term oxygen therapy,[3] stable COPD patients on optimum therapy who meet the above criteria should receive continuous O_2 therapy for life. Once the need for long term oxygen therapy is documented, repeated measurements of arterial blood gases or saturation to document persistent hypoxemia are not necessary[3], because oxygen therapy can effect improvement in the levels of arterial blood gases in some patients.[4] Cessation of oxygen therapy at this point could be detrimental to the patient with chronic cardiopulmonary disease.

We evaluated the oxygen needs of 41 COPD patients receiving continuous oxygen therapy for more than a year. Arterial blood gases revealed PaO_2 greater than 60 torr in 13 patients. This study focuses on the variation in severity of nocturnal hypoxemia in these 13 patients and the usefulness of pulse oximetry in making the evaluation.

Patients and Methods

The oxygen needs of all patients with COPD were reevaluated one to five years after beginning home oxygen therapy. All patients were clinically in stable condition and on optimal bronchodilator therapy consisting of theophylline, a beta-adrenergic metered dose inhaler and ipratropium bromide metered dose inhaler. Besides physical examination, the following were obtained: chest roentgenogram, pulmonary function tests (spirometry, lung volume estimation by nitrogen washout, carbon monoxide diffusion capacity) (Med Graphics Corporation System 1070), arterial blood gases (Corning 168 pH/blood gas analyzer) and oxyhemoglobin saturation by a co-oximeter (Instrumentation Laboratory). Patients with awake, resting PaO_2 of 60 torr or greater and without polycythemia or right heart failure, were further evaluated with a 12-minute walk and a nocturnal pulse oximetry study. Medical records of these patients were also analyzed to assess the stability of disease and arterial blood gases at the time of initiation of long-term oxygen therapy.

12-minute walk

Resting oxyhemoglobin saturation (SpO_2) was measured by pulse oximeter (Novametrix 515). If resting SpO_2 was 90% or more, the patients were asked to walk at their normal pace for 12 minutes or to their limit of tolerance. The total distance walked, reasons for stopping, and the lowest SpO_2 measurement were noted. Desaturation to 88% or less was considered significant to warrant oxygen therapy during physical exertion.

Nocturnal pulse oximetry

Patients were admitted to a private room. Before the patients went to sleep, a nasal cannula was put in place to deliver oxygen if needed, and a pulse oximeter (Biox 3700, Ohmeda) probe was taped to the index finger. Continuous recording of SpO_2 was obtained (680 strip chart recorder, Hewlett Packard) after the patients were sound asleep, usually at midnight. A respiratory therapy technician remained in the room to monitor for apneic episodes and to observe the SpO_2 tracings. The technician analyzed the pulse oximeter printout every hour. Any desaturation to 85% or less that lasted one minute or more was considered significant. If desaturation occurred, supplemental oxygen at the flow rate of 1 L/minute was administered by nasal cannula for the next hour. If needed, the oxygen flow rate was increased every hour to keep the SpO_2 between 90-92%. If no significant desaturation was noted in the first hour, the study was continued for 2 more hours. A desaturation lasting for less than one minute was not considered significant and supplemental oxygen was not administered. Various assessments of the severity of hypoxemia included the lowest SpO_2 achieved, total sleep time (TST_{85}) spent with SpO_2 of 85% or less (Fig. 1), total number of desaturations with SpO_2 of 85% or less (N_{85}), total number of desaturations with SpO_2 of 85% or less and duration of 1 minute or more (N_{sd}) and the duration of the longest desaturation of 85% or less in minutes (L_{sd}). The oxygen flow required to overcome these desaturations and to maintain an SpO_2 of 90-92% was noted.

Because two different pulse oximeters were used for measuring SpO_2 during the 12-minute walk and sleep, we also evaluated the difference in readings of the two oximeters by placing them simultaneously on the same person. The SpO_2, readings were within 1% at all times.

RESULTS

Of the 41 COPD patients on home oxygen therapy, 13 patients were found to have PaO_2 of 60 torr or higher. All 13 patients had severe airways obstruction (FEV, less than 50% of predicted, FEV_1/FVC ratio less than 55%). All these 13 patients were "pink puffers" without evidence of polycythemia or right-sided heart failure. Eight of the 13 patients also had significant heart disease: ischemic heart disease requiring antianginal therapy (n=6), arrhythmias (n=1) and bifascicular heart block (n=1). Review of medical records revealed that only three of these 13 patients were appropriately started on long-term oxygen therapy at initial evaluation (PaO_2 less than or equal to 55 torr in clinically stable condition and while on maximal bronchodilator therapy). The other 10 patients had PaO_2 of 60 torr or more either at the time of initiation of oxygen therapy or at the time of reevaluation. They were in clinically stable condition and thus had not begun long-term oxygen therapy appropriately.

Patient characteristics, pulmonary function test result, and arterial blood gases at reevaluation plus results of 12-minute walk and nocturnal oximetry are summarized in Table 1.

Two patients were unable to walk; both had significant nocturnal desaturation. Four patients had significant oxyhemoglobin desaturation while walking, three of them also had significant nocturnal desaturation. Seven patients had no desaturation during exercise, although four of them had significant desaturation at night. Thus, the presence or absence of significant nocturnal desaturation could not be predicted by a 12-minute walk.

At the time of nocturnal oximetry, the awake, supine SpO_2 measured by pulse oximetry was greater than 90% in all patients. Apnea was not suspected clinically nor noted in these 13 patients. Nine patients had significant sustained nocturnal desaturation corrected by oxygen supplementation. The various measurements of desaturation that is, TST_{85}, L_{sd}, N_{85}, and N_{sd} were extremely variable and unpredictable (Table 1). Based on these studies, oxygen therapy was discontinued in three patients and modified in the other 10 patients.

DISCUSSION

Two studies[1,2] have shown that home oxygen therapy can prolong life in stable COPD patients who have daytime hypoxemia (PaO_2 less than or equal to 55 torr). Oxygen therapy is not currently recommended for COPD patients with awake, resting PaO_2 of 60 torr or higher because the long-term benefits of oxygen therapy in these patients have not been studied. Three of our 13 COPD patients had met criteria for long-term oxygen therapy (LTOT) when they began home oxygen therapy and were reevaluated when their daytime PaO_2 values to rose to 60 torr or higher. The recent consensus conference[3] clearly specifies that such patients should continue to receive oxygen.

Ten of the 13 patients did not meet criteria for LTOT at the time of initiation. We did not discontinue their oxygen after re-evaluation but elected to study their oxygenation during sleep and exercise. We are not advocating this approach as the correct method of evaluation of COPD patients who do not meet criteria for LTOT. Rather, our study is meant to highlight the diversity of nocturnal desaturation levels in these patients. For patients with COPD who do not meet guidelines for LTOT by awake, resting oxygenation levels, it is difficult to know what level, duration, or frequency desaturation during sleep warrants administration of supplemental oxygen[5]. We feel that in the absence of studies documenting the benefits of oxygen therapy in these patients, the decision to initiate oxygen therapy should be individualized, taking into account the severity of COPD and coexistent diseases, symptoms, and the severity of nocturnal hypoxemia measured by pulse oximetry.

Block et al[6] studied 30 normal men and found that desaturation during sleep occurred in about one-third of them. The majority of these episodes were related to hypopnea, were relatively short (mean 26 seconds), and occurred during light or rapid eye movement sleep. Tirlapur and Mir[7] found that among COPD patients, "blue-bloaters" had a high incidence of sustained nocturnal hypoxemia (drop in SpO_2 by 10% from baseline, lasting for at least

Figure 1

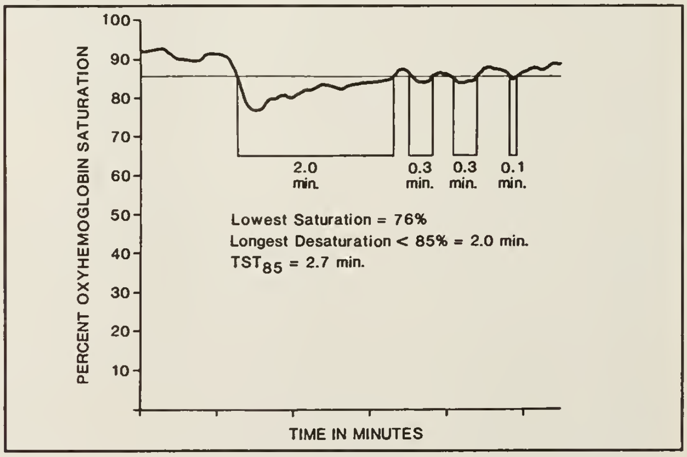

Illustration of calculation of total sleep time spent with SpO_2 of 85% or less (TST_{85})

1 minute), which were associated with higher heart rate, prolongation of QT interval and ST-T wave changes. These changes were abolished by oxygen therapy. The four "pink-puffers" in the study did not have frequent episodes of sustained hypoxemia associated with electrocardiographic changes. Since six of our patients had symptomatic coronary artery disease and the other seven were older patients with risk factors for coronary artery disease, we were concerned about the possible deleterious effects of sustained hypoxemis, for example, silent ischemia or arrhythmias. For this reason, we decided that desaturation to 85% or less, lasting for 1 minute or more was significant and would warrant oxygen supplementation during sleep.

When sleep apnea/hypopnea syndrome (SAHS) coexists with COPD, the clinical symptoms of SAHS are present. Sleep studies do not yield unsuspected cases of SAHS. Thus, sleep studies are not indicated in patients with COPD except when clinical suspicion for SAHS exists5. We did not perform electroencephalography on our patients, so we do not have a record of the time spent in each stage of sleep. The major cause of hypoxemia during sleep in patients with COPD is hypoventilation during rapid-eye-movement (REM) and Stage 2 of non-REM sleep[5]. The desaturations in REM sleep are often transient, while desaturations in Stage 2 of non-REM sleep are more long lasting and more closely related to the mean oxygen saturation during sleep. We monitored SpO_2 by pulse oximetry only after the patients appeared to be asleep. Thus, the absence of sustained desaturations in four patients may theoretically have been because of lack of REM, Stage 2 non-REM sleep, or both. In the absence of electroencephalographic monitoring, pulse oximetry performed for a longer duration may have been more reassuring about the absence of significant desaturations in these patients.

"Blue-bloater" patients usually qualify for LTOT by current criteria, but "pink-puffers" with awake, resting PaO_2 of 60 torr or more, do not. We reviewed the literature to determine the significance of nocturnal desaturations in the latter group of patients. Fletcher et al[8] found that 37 of 135 (27%) of clinically stable COPD patients with daytime PaO_2 of 60 torr or more had desaturation below a baseline saturation of 90% for five minutes or more with a nadir saturation of at least 85%. Comparison between desaturators and nondesaturators revealed that the awake PaO_2 at rest in desaturators was significantly lower (69.8 ± 7.4 versus 75.5 ± 8.2 torr) and the $PaCO_2$ was significantly higher (41.2 ± 5.0 versus 38.2 ± 4.9), but the overlap between these two groups was sufficient to make these parameters alone of little help in predicting nocturnal desaturations. Thus, they concluded that continuous oxyhemoglobin monitoring during sleep was the only reliable tool for detecting nocturnal desaturation. The clinical relevance of this observation to the treatment of COPD patients was unknown.

Midgren et al[9] noted that nocturnal desaturation to 85% or less in non-REM sleep could be predicted by a $PaO_2/PaCO_2$ ratio of less than 1.4 in COPD patients. Equations can predict the mean lowest SpO_2 during sleep[10, 11], and the

TABLE 1

Characteristics of 13 patients with chronic obstructive pulmonary disease with PaO_2 of 60 torr or more

Patient #	Age yrs	Race	Sex	Weight kg	Height cms	Wt/Ht ratio	FEV_1 in L	FEV_1/FVC ratio%	DLCo% of pred	PO_2 torr	PCO_2 torr
1 *	61	W	M	74	177	0.42	1.4	35	30	67	37
2	71	W	M	72	175	0.42	1.5	52	40	60	36
3	59	W	M	101	180	0.56	1.2	40	27	61	42
4 *	64	W	M	70	170	0.39	0.4	31	34	66	39
5	70	W	M	92	180	0.52	1.6	49	63	64	33
6	71	W	M	113	175	0.64	0.9	34	-	63	51
7 *	59	W	M	68	177	0.38	1.6	53	-	63	36
8	81	W	M	77	170	0.45	1.5	49	59	66	35
9	62	W	M	73	175	0.42	0.8	35	31	65	41
10	64	W	M	77	167	0.46	0.7	46	61	62	45
11	73	W	M	76	172	0.44	0.9	31	41	66	42
12	71	W	M	77	165	0.47	1.1	33	28	64	39
13	66	W	F	52	152	0.34	0.8	50	50	60	38

* initial decision to start long term oxygen therapy was appropriate

FEV_1= Forced Expiratory Volume in 1 second, FVC=Forced Vital Capacity, DLCo=Diffusion capacity for carbon monoxide, SpO_2 = Oxyhemoglobin saturation, L_{sd}=duration of longest desaturation less than or equal to 85% in minutes, TST_{85}=Total sleep time spent with SpO_2 less than or equal to 85%, N_{85}=Number of desaturation episodes with SpO_2 less than or equal to 85% and lasting 1 minute or more, hr=number of hours of study with patient breathing room air mean nocturnal SpO_2 [11] from awake SpO_2 and $PaCO_2$ values, but the percentage of sleep time spent below a given SpO_2 was not predicted accurately.[10] Connaughton et al[11] looked at the survival of patients with COPD who did not qualify for LTOT by daytime blood gas measurement, and found that the presence or absence of excess nocturnal desaturation (in relation to the predicted values of mean and lowest SpO_2) had no influence on survival. Awake, resting PaO_2 was the only factor directly related to survival.

Douglas and Flenley[5] recommended that sleep studies not be done for evaluating COPD patients for LTOT. Daytime PaO_2 values are sufficient for this purpose. This may be true as a general statement, but we feel that nocturnal pulse oximetry may be justified in an individual patient to assess the frequency of sustained desaturation and percentage of sleep time spent below a level of saturation. An example would be a COPD patient with coronary artery disease, where the myocardial oxygenation is dependent upon oxygen delivery and thus on Spo_2.

Fletcher et al[12] have shown that among patients with daytime PaO_2 greater than 60 torr, nocturnal desaturations (SpO_2 less than 90% for at least 5 minutes with nadir of 85%) are associated with greater increases in systolic blood pressure, mean pulmonary artery pressure, and pulmonary vascular resistance with exercise than nondesaturators. Exercise desaturation is not predictive of nocturnal desaturation. It is not known whether these physiologic abnormalities require oxygen therapy. Our study shows that desaturation to SpO_2 of 88% during a 12-minute walk also does not predict the occurrance of sustained nocturnal desaturations (SpO_2 less than 85%, duration greater than 1 minute).

Various drugs have been used to improve daytime and sleep oxygenation. Almitrine has been shown to improve daytime oxygenation and median nocturnal SpO_2 in COPD patients with mild hypoxemia (PaO_2, 65 torr[13]). Medroxyprogesterone has been shown to improve CO_2 retention and PaO_2 in COPD patients with chronic CO_2 retention by improving alveolar ventilation[14]. Medroxyprogesterone has also been shown to improve daytime PaO_2 values in COPD patients without CO_2 retention and minimal hypoxia (PaO_2 65 torr), although no change was noted in the lowest SpO_2 level during sleep.[15] Protriptyline has been shown to improve daytime PaO_2 and thus the nocturnal SpO_2 ,with decrease in REM sleep in patients with COPD.[16] The problem in evaluating the beneficial effects of all these drugs is that we still do not know what degree of nocturnal desaturation is significant. Long term studies similar to NOTT and MRC trials are needed to determine the "significant nocturnal desaturation." The marked diversity in the level of nocturnal desaturation in otherwise similar COPD patients (FEV_1, PaO_2, $PaCO_2$) underscores the importance of sleep studies before patients are enrolled in a randomized trial, so that similar groups of patients are compared.

In conclusion, COPD patients with awake, resting PaO_2 of 60 torr or higher, frequently have desaturation (SpO_2 less than or equal to 88%) with exertion 31%) and

TABLE 1 (continued)

Patient #	12 Minute walk	Nocturnal Pulse Oximetry					New O_2 prescription	
	Distance in Feet/ Time in Minutes/ Lowest SpO_2	Lowest SpO_2	L_{sd}	TST_{85} in Minutes	N_{85}	N_{sd}	O_2 L/min	When?
1 *	2205/12/87%	86%	0	0/3hr	0	0	1	walk
2	unable	82%	3	15/hr	13	6	1	sleep
3	275/12/89%	87%	0	0/3hr	0	0	discontinue 0_2	
4 *	100/3/88%	82%	1.1	8.5/hr	42	1	1	walk, sleep
5	2000/12/90%	78%	2	5.5/hr	5	3	2	sleep
6	unable	62%	2	4.5/hr	8	1	2	sleep
7 *	1598/12/98%	78%	13	22/hr	4	4	2	sleep
8	1280/12/94%	84%	0.9	1.4/3hr	2	0	discontinue O_2	
9	1485/12/87%	77%	28	43/hr	16	9	2	walk, sleep
10	1160/12/93%	85%	2	4.3/hr	9	1	1	sleep
11	327/5/88%	80%	1	16/hr	29	2	1	walk, sleep
12	1271/12/92%	80%	17	34/hr	10	7	1	sleep
13	700/8/94%	85%	0.2	0.4/3hr	3	0	discontinue O_2	

they also frequently develop sustained nocturnal desaturation (SpO_2 less than or equal to 85% lasting for greater than or equal to 1 minute) during sleep (69%). The severity of nocturnal desaturation cannot be predicted by daytime blood gases, severity of airways obstruction, or desaturation during exercise. Pulse oximetry may be an easy method of assessing the severity of nocturnal desaturation. In the absence of the usual criteria for initiation of LTOT, the decision to initiate oxygen therapy, after pulse oximetry during sleep and 12-minute walks, should be individualized. ■

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Current Progress in HIV Vaccines

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Since the first reports in 1981 the number of AIDS cases have increased at an alarming rate. By the end of 1990 more than 100,000 people had died from AIDS in the United States [1] and an estimated one million Americans are currently infected with the virus[2]. WHO estimates that 700,000 people world wide have developed AIDS with an additional 8-10 million people being infected. Global projections say that by 1999 close to 20 million people will be infected with HIV and 6 million diagnosed with AIDS[3].

In light of these predictions it seems clear that future strategies to control this infection must include both effective treatments and vaccines that can prevent infection. The primary function of an HIV vaccine would be to prevent infection, but it could also potentially be used to block perinatal transmission of the virus and perhaps to boost immunity among people already infected with HIV.

Type of Immunity Needed

In order to fully protect against infection a suitable vaccine may have to induce both neutralizing antibodies and cytotoxic T cell activity. This is important because natural transmission of HIV occurs both through free virus and virus-infected cells. Natural infection of a few host cells may also theoretically take place in the early phase of exposure even in an individual who is fully immunized. It is therefore important that vaccination establishes an effective clearance mechanism for such infection.

Neutralizing antibodies are primarily directed against the envelope protein gp120, particularly an area of the molecule named the V3 loop[4]. Antibodies to the V3 loop can neutralize cell-free HIV-1 and prevent cell fusion and binding. Several proteins of HIV-1 are also targets of cytotoxic T lymphocytes. Such lymphocytes, isolated from HIV-1 seropositive patients, have been shown to lyse both HIV-1 infected cells or cells expressing HIV envelope proteins. It is thought that an effective HIV vaccine must be able to induce both these types of immune response[5].

Animal Experiments

Even though we know what kind of immunity will be needed for protection, for a long time there was uncertainty whether such immunity could be induced by a vaccine. However, in 1990 Berman et al reported encouraging results from an animal experiment [6]. Gp120, produced by recominant DNA technology and glycosylated through use of Chinese hamster ovary cells, were injected into two chimpanzees. After three doses both animals showed high titers of neutralizing antibodies as well as cellular immunity based on stimulation of lymphocyte proliferation. When the animals were challenged with HIV both were protected against infection, while one control animal and two chimpanzees immunized with a different prototype vaccine made from gp160 all became infected.

A similar experiment was reported in early 1991 by Girard et al from the Pasteur Institute in France [7]. Three chimpanzees had been immunized with combinations of recombinant HIV proteins including gp160 and the V3 loop. Two animals had also been given either a live recombinant vaccinia virus expressing gp160 or a formalin inactivated whole HIV. When challenged with intravenous HIV

Significant scientific progress towards an AIDS vaccine has been made in the last couple of years. This includes development of animal models for vaccine evaluation and demonstration of vaccine induced protection against challenge with HIV. Preliminary clinical trials have proven the safety and immunogenicity of several investigational HIV vaccines. Urged by the global epidemic of HIV infection some of these vaccines may soon move on to large scale field trials.

two of the three animals were protected, including the one vaccinated with only recombinant proteins.

These two experiments were significant for several reasons. They showed for the first time that protection against HIV infection is possible through immunization. Previous experience from chimpanzee models suggests that a vaccine that works in the animal model is likely to work in humans as well. Another important piece of information gained from these experiments is that adequate immunity can be achieved using only a subunit protein vaccine. We now know that protective immunity does not require whole inactivated or live attenuated vaccines, which both would be too risky to use because of the chance of a reversion back to a virulent state. With a subunit vaccine, free of virus, there is no possibility that any vaccinee would accidentally acquire HIV infection from the vaccine.

Vaccines Currently Being Tested In Humans

Nine different AIDS vaccines currently are being tested in humans worldwide (Table 1). Five of these vaccines are being tested in countries outside the US, such as England, Switzerland and France. These include anti-CD4, recombinant gp120, synthetic core proteins, and a vaccinia virus expressing envelope glycoproteins. Four vaccines are currently being tested in the US. Three of them use gp160 envelope protein as the major antigen, and one uses gp120. An additional fifth vaccine uses whole irradiated HIV, developed by Dr. Jonas Salk. Contrary to the other vaccines it contains the whole HIV in inactivated form and will therefore not be considered for immunization of healthy non-infected individuals at this time.

The three vaccines containing gp160 are slightly different from each other because of the way the protein was produced and may therefore have different antigenic activity. All three vaccines are currently being tested at the St. Louis University AIDS Vaccine Evaluation Unit.

Baculovirus Produced gp160

The first vaccine to be tested was a recombinant gp160 manufactured by MicroGeneSys Inc [8]. This vaccine is produced using a baculovirus vector, an insect virus that infects Lepidopteran cells in tissue culture. The HIV envelope glycoprotein is then mixed with alum and given as an I.M. injection. When this vaccine was tested in doses of 40 pg or 80 pg it produced an IgG response in 91% of volunteers after three doses. This antibody peaked after the third dose, but fell rapidly thereafter. When some volunteers were given a fourth dose after 18 months an anamnestic booster response was seen. Low level neutralizing antibodies were seen in 21% of vaccinees [8], and cytotoxic t-cell activity was detected in 3 of 8 subjects [9]. Evaluation of this vaccine is continuing, now in higher doses of up to 640 pg which are expected to produce increased levels of antibodies.

Vaccinia-gp160 Live Recombinant

The vaccinia virus has been used extensively in the past for vaccination against smallpox. With recombinant DNA technology it has found a new use as a potential vaccine for HIV [10]. This technique makes it possible to insert foreign genes into the thymidine kinase locus of the vaccinia virus. Bristol-Meyers Squibb/Oncogen has inserted the gene coding for gp160, resulting in a vaccinia virus which expresses the gp160 protein on its surface. Because this vaccinia virus remains infective it can induce an immune response, and also expresses the HIV antigen in the process. The technique of using the vaccinia virus as a vector to express HIV-1 antigens has several advantages. It is inexpensive to produce and is stable for long-term storage. There is also a considerable experience world-wide with vaccinia virus vaccine, dating from the times of active small pox infections.

When tested in phase I studies this vaccine was shown to produce strong T-cell proliferative responses to HIV-1, particularly in individuals who had never been vaccinated with vaccinia before [11]. If the vaccine was followed by one or more boosters consisting of rgp160 the vaccinees also developed an anamnestic T-cell response and produced neutralizing antibodies [12].

Vaccinia Produced Recombinant gp160

The third type of gp160 vaccine is produced by Immuno AG in Austria [13]. It uses a vaccinia virus as a vector and infects mammalian tissue culture cells. This results in expression of a glycosylated gp160 in the cells that can be purified and used as an antigen. Because the gp160 is produced in a mammalian rather than an insect cell line it may be better suited to produce an immune response when given to humans. Clinical trials are beginning now with this vaccine.

Future Vaccines

Additional vaccine strategies are currently being investigated. One of them is the combination of initial vaccination with a live recombinant vaccinia followed by boosters of purified gp160. Such a vaccination schedule promises to induce both cellular and humoral immunity. As an alternative to vaccinia, both adenovirus [14] and polio virus [15] are being considered as potential vectors of HIV antigens. Another area of future research is the choice of adjuvant for the vaccines. Alum has been used in the initial trials but alternative adjuvants, including the use of immunostimulating complexes (ISCOMs) [16], are being investigated. Apart from the trials with gp160 vaccines there are now human studies evaluating also gp120 as an antigen. The vaccine used to successfully immunize chimpanzees has been approved for use in human trials.

Discussion

Research on HIV vaccines have progressed at a rapid speed. Today, only a few years after the discovery of the virus causing AIDS, we have several promising vaccines under evaluation. Four of them are currently being tested at St. Louis University (Table 1). In a historic perspective the development of these vaccines has taken place at an unprecedented speed. It took 20 years to identify Hepatitis B virus after the disease was recognized and an additional six years before the first vaccines were in phase I studies. Today's HIV vaccines have accomplished the same thing in a quarter of that time.

Still many obstacles remain to be overcome. Even a seemingly simple task such as recruitment of volunteers becomes much more complicated than for other vaccines. It has been calculated that an average of 4.8 people have to be screened for every volunteer finally vaccinated with a HIV vaccine [17]. This is because many volunteers have to be excluded on the basis of abnormal screening tests. In a study of 166 volunteers more than a quarter were found to have indeterminate Western Blots showing one or more weakly positive bands [17]. Even though such bands are unrelated to HIV and have no clinical significance, their presence on the Western Blot would interfere with the interpretation of the vaccine response and therefore constituted an exclusion criteria. Another 24% of volunteers were eliminated because they changed their mind. Many times this was the result of pressure from family or friends who were misinformed about the nature of the study. There is a potential for social stigmatization from the development of antibodies to HIV, but a lot of efforts have been made to counter that risk. Since all current vaccines contain only envelope antigen they produce their own fingerprint on the Western Blot which can easily distinguish between vaccination and true infection. NIH is also issuing a personal identification card for every vaccinee. This identifies them as a participant in one of the vaccine studies and lists an 800 telephone number where the information can be verified by NIH.

Finding a suitable AIDS vaccine goes beyond just finding the right antigen to use. Because of the explosive spread of HIV infection in some countries on the African continent it is of highest priority that an effective vaccine has an immunization schedule that is practical in developing countries. Strategies using multiple injections may not be optimal because of problems following patients in these countries. Vaccines requiring the fewest possible injections are most desirable. Current and future vaccines therefore ideally should induce rapid immunity if they are going to curb the spread of the current global HIV epidemic.

There are also public policy issues that need to be addressed. An expedited research strategy is needed to evaluate the many vaccines being produced around the world. Only a few of them can be selected for field trials, but that decision must be based on a simultaneous evaluation of both basic research and data from animal models in order to minimize delay [18]. The tremendous costs involved in developing an AIDS vaccine also need to be met through creative incentives for the private sector. If all the costs are to be carried by the individual consumer they may turn out to be prohibitive for the populations that need the vaccine. This may be particularly true for Third World countries where the need is great but resources limited.

Still, there is room for much optimism. Significant scientific progress has been made in the last couple of years

Table 1

HIV VACCINES CURRENTLY UNDER EVALUATION IN HEALTHY HUMAN VOLUNTEERS

ANTIGEN	GENETIC ENGINEERING METHOD	MANUFACTURER	TEST SITE
gp 160	Baculovirus produced antigen expressed in insect cell line	MicroGeneSys	USA*
gp 160	Live recombinant vaccinia vector	Oncogen	USA*
gp 160	Vaccinia produced antigen glycosylated in mammialian tissue culture cells	Immuno AG	USA*
gp 160	EBV transformed lymphocytes infected with recombinant vaccinia virus	University of P.&M.Curie	France
gp 120	Nonglycosylated antigen produced in Saccharomyces yeast	Chiron/Ciba-Geigy	Switzerland
gp 120	Glycosylated antigen produced in mammalian tissue culture cells	Genentech	USA*
p24	Recombinant protein produced in yeast	British Biotech	England
p17	Synthetic protein coupled in keyhole limpet heomcyanin	Viral Technologies	England
anti-CD4	Anti-idiotype antibodies	Becton-Dickinson	England

*Currently being tested at the St. Louis University AIDS Vaccine Evaluation Unit.

that promises safe and effective vaccines against HIV. Such progress includes development of animal models for vaccine evaluation and demonstration of vaccine induced protection against challenge with HIV. Preliminary clinical trials have proven the safety and immunogenicity of investigational HIV vaccines. Urged by the global epidemic of HIV infection and scientific progress on AIDS vaccines some of these vaccines may move on to large scale field trials within the next few years.

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Primary Pancreatic Tuberculosis

James R. Allen, M.D., Laird A. Bauer, M.D., Lawrence Evans, M.D.
and Kenneth Watson, D.O.
Kansas City, Missouri

A 71-year-old man developed weight loss, nausea, and night sweats. A PPD skin test was positive; chest films were normal. Abdominal computerized tomography revealed a mass in the head of the pancreas. Laparotomy revealed a 3 cm by 5 cm multi-loculated abscess cavity. Cultures grew Mycobacterium tuberculum. The diagnostic criteria for abdominal tuberculosis include skin test positivity, localized disease, and culture verification. This is the first reported case that fulfills diagnostic criteria for primary pancreatic tuberculosis.

A 71-year-old white male mass transit supervisor was well until six months prior to admission, when he developed intermittent evening fever and chills. Three weeks prior to admission, the patient developed nausea and emesis, not associated with meals. During this period of time, he lost 27 pounds. He was evaluated at another clinic with a chest x-ray, barium enema, and bone marrow biopsy. He was then referred to St. Luke's Hospital in Kansas City for additional tests.

His medical history included lumbar laminectomy 22 years previously, hypertension for 10 years, and a myocardial infarction seven years prior to admission. He had a 60 pack-year smoking history, but did not drink alcohol.

Physical examination was remarkable for a temperature of 100.3F, expiratory wheezing bilaterally, and a grade I/VI systolic ejection murmur over the PMI. No abdominal mass was noted.

HOSPITAL COURSE

On admission an abdominal computer axial tomography (CAT) scan was performed, demonstrating a 2 cm. nodule in the head of the pancreas. The admission laboratory studies showed a white blood cell count of 6.8 and a hemoglobin and hematocrit of 8.9 and 27. The urinalysis, electrolytes, glucose and liver enzymes were within normal limits. At exploratory laparotomy, a presumptive diagnosis of pancreatic carcinoma was made. The pancreas was found to be enlarged and indurated. A 3 cm by 5 cm multiloculated abscess cavity was found and opened. Grey, purulent abscess fluid was cultured and sent for microscopic evaluation. Several biopsy specimens of the pancreas and lymph nodes were taken, and the abdomen was drained.

Microscopic examination of pancreatic and parapancreatic lymph node and soft tissue specimens revealed necrotizing epithelioid granulomas with multinucleated giant cells. (Fig. 1) Methenamine silver, Warthum-Starry gram stain and acid fast stains were negative for microorganisms. Further blood testing, including tests for fungal immunodiffusion, febrile agglutinins and hepatitis antigens, were without pathologic findings. Biopsy specimens later were found to contain mycobacterium tuberculosis. On additional questioning, the patient finally admitted to having a confirmed positive PPD tuberculosis test in the year prior to admission. The patient was started on INH and rifampin and recovered over the next three weeks. The patient was discharged on INH and rifampin therapy. One year later, the patient was asymptomatic; he had regained the weight he lost and had returned to work full-time.

DISCUSSION

Tuberculosis is a disease that should be included in nearly every differential diagnosis. In the United States, the overall incidence of tuberculosis has declined over the past decade. The incidence of extrapulmonary tuberculosis has stayed steady, showing only statistical fluctuations.

Since 1975, the Centers for Disease Control have recorded more detailed information about the aratomic site of disease. Beginning in 1985, tuberculosis cases have been reported by specific gastrointestinal site. Pancreatic tuberculosis is one of the least common sites of cocurrence; the liver is the most common site.

Fauer et al[2] published a retrospective survey of cases of extrapulmonary tuberculosis for the period 1969 to 1973. Of the total 7,891 patients, 1,423 had both pulmonary and extrapulmonary disease, 1,350 had disease in only one extrapulmonary site, and 321 had disease in multiple sites. Abdominal tuberculosis was present in 4%, making the abdomen the least common of any extrapulmonary site.

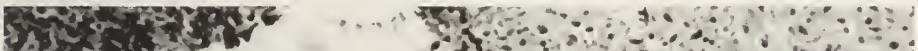
Successful identification of mycobacterial disease within the abdomen is often a difficult and time-intensive diagnostic problem. With abdominal tuberculosis, the usual symptoms of colicky postprandial pain, anorexia and weight loss are nonspecific and are associated with an array of far more prevalent diseases. Conversely, the symptoms referable to the abdomen comprise only 3%- 4% of all extrapulmonary manifestations of tuberculosis; overt gastrointestinal symptoms are found in fewer than 1% of all patients with tuberculosis.[3] When abdominal symptoms do occur, gastrointestinal tuberculosis mimic other disorders, such as tumor, hepatitis, pancreatitits, and obstruction. Classic mycobacterial symptoms, such as night sweats, are not always present when the abdomen is the primary focus of infection.

Miliary tuberculosis is the generalized dissemination of infection by vascular or lymphatic means. Auerbach compiled a review of 1,656 autopsies on tuberculous patients performed over 8 years.[4] Generalized miliary tuberculosis was found in 297 cases, or approximately 18%. Miliary foci were found in the lungs and spleen in all cases, the kidney in 70%, adrenals 28%, the brain 10%, and thyroid in 3% of cases. Pancreatic involvement with abdominal involvement was not mentioned.

The clinical presentation of miliary tuberculosis may take many forms. Abdominal pain may be present in 7%-14% of cases, usually due to tuberculous infiltration of the peritoneum and gastrointestinal tract.[5] Rushing et al described a patient with miliary tuberculosis who presented with fever, epigastric tenderness, and a negative TB skin test who was found to have hyperamylasemia. The patient developed ARDS and eventually died. At autopsy multiple organs, including pancreas and lungs, contained microabscesses with clusters of acid-fast bacilli.[6]

Isolated pancreatic involvement with Mycobacterium tuberculosis in the absence of obvious involvement of other abdominal organs is exceedingly rare. Paraf et al found only 11 cases of primarily pancreatic or parapancreatic tuberculosis reported in the medical literature between 1891 and 1961.[7] Individual case reports vary. One describes a patient who had suffered from multi-organ tuberculosis throughout her life.[8] Crowson et al described a young man who developed pancreatic tuberculosis years after antituberculous therapy for a paravertebral bascess.[9] Following laparotomy, a large mass in the head of the pancreas was found to contain acid-fast bacilli and granulomata. In another case, massive gastrointestinal caused the death of a patient after a tuberculous mass in the pancreatic head eroded into the duodenum.[10] Another patient who had a pancreatic abscess was found at autopsy to have generalized miliary tuberculosis.[11] Anorexia, weight loss and abdominal pain prompted the admission of another patient[12], who was found to have a pancreatic mass by abdominal sonogram, ERCP and a

Figure 1



Sections of pancreas and surrounding soft tissue reveal necrotizing epithelioid granulomas with multinucleated giant cells (Hematoxylin-cosin).

selective splenic anteriogram. Stain and cultures of the granulomatous material found at laparotomy failed to yield a diagnosis despite the presence of positive TB skin test. The patient was treated with antituberculous therapy with good response.

One man had fever, headaches, and weight loss. He was found to have an enlargement of the pancreatic head on the CT scan. This patient also had a positive TB skin test, and laparotomy revealed an abscess whose tissue contained acid-fast bacilli although culture-specific identification was not reported.[13] These anecdotal cases illustrate how pancreatic tuberculosis can imitate other abdominal pathology.

Making the diagnosis of pancreatic tuberculosis is often a chance occurrence. Radiographic studies such as CT scan, ERCP and sonography are sensitive but not specific. Ultrasound or CT guided needle aspiration of pancreatic masses can be diagnostic if special stains are used. However, the diagnosis is usually reached after exploratory laparotomy or autopsy.

In one report, a patient had a positive skin test and granulomous mass in the pancreas, but no acid-fast bacilli were found by stain or culture.[14]

Culture results may be helpful, but in Farer's series[2], 43% of extrapulmonary cases were not bacteriologically confirmed. This percentage included both false negative cultures and those cases where cultures were not done. For abdominal tuberculosis, cultures were not obtained in 27% of 309 cases and cultures were falsely negative in 14%. Thus, in this series, a total of 41% of abdominal TB cases went bacteriologically unconfirmed.

In this same study, tuberculin skin test data was available for only a third of patients with extrapulmonary TB. The majority of those patients in whom skin testing was reported (88%) had positive tests. The statistics were not analyzed as to type of extrapulmonary disease; therefore, the percentage of abdominal TB patients with positive skin tests is unknown. It would presumably be similar to the above.

Our patient presented with features common to abdominal tuberculosis cases. He had a long prodrome of weight loss, fatigue, fever and night sweats. A tuberculin skin test obtained prior to admission was positive. No symptoms initially involved the abdomen, and initial diagnostic studies were nonrevealing. A CT scan revealed a pancreatic mass, and -- as is often the case -- the diagnosis was obtained following laparotomy.

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5 - 6 Transesophageal Echocardiography Course — Location: St. Louis University Medical Center, St. Louis, MO. Contact: St. Louis University Medical Center, CME Office, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

6 5th Annual Kansas City Lipid Club Symposium — Location: Marriott-Overland Park Hotel, Overland Park, KS. Contact: Monica Scheierman, University of Kansas Medical Center, Office of Continuing Education/SC100, Rainbow and Olathe Blvds., Kansas City, KS 66103. 913/588-4490.

7 - 9 69th Annual Fall Clinical Conference — Location: Marriott Hotel, Overland Park, KS. Contact: Linda F. Smutz, Kansas City Southwest Clinical Society, 7920 Ward Parkway, Suite 205, Kansas City, MO 64114. 816/523-3383.

7 - 10 Surgical Approaches to the Skull Base — Location: St. Louis University School of Medicine, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

11 City-Wide Radiology Conference by Robert Edelman, M.D., "Advances in Vascular MRI," — Location: Mallinckrodt Institute of Radiology, St. Louis, MO. Contact: R. Gilbert Jost, M.D., Chief of Diagnostic Radiology, Mallinckrodt Institute of Radiology, 510 S. Kingshighway, St.Louis, MO 63110. 314/362-7130.

13 Update on Viral Hepatitis — Location: vonGontard Conference Center, St. John's Mercy Medical Center, St. Louis, MO. Contact: St. John's Mercy Medical Center, 615 S. New Ballas Rd., St. Louis, MO 63141. 314/569-6930.

13 - 15 Pediatric Advanced Cardiac & Trauma Support For Life and Pediatric Advanced Life Support Course (PACTS/PALS) — Location: St. Louis University Medical Center, St. Louis, MO. Contact: CME Office, St. Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

15 - 16 OB/GYN Update 1991 — Location: Holiday Inn Executive Center, Columbia, MO. Contact: Barry Kling, University of Missouri-Columbia School of Medicine, Continuing Education, MA215 Health Sciences Center, Columbia, MO 65212. 314/882-4105.

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17 - 20 Faculty as Small and Large Group Teacher — Location: Cedar Creek Farm Conference Center, New Haven, MO. Contact: Judith L. O'Guin, St. John's Mercy Medical Center, 314/569-6290.

22 Toxicology Update 1991 Location: St. Louis Science Center, Saint Louis University Medical Center, St. Louis, MO. Contact 800/553-2712.

23 An Overview of the Arthritides with an Emphasis on Treatment Location: The Ritz-Carlton Hotel, St. Louis, Mo. Louis MO. Contact Washington University School of Medicine. 314/362-6893.

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5 - 6 The Heart 1991, 21st Annual Conference on Current Topics in Cardiology Location: The Ritz Ritz-Carlton Hotel, Kansas City, MO. Presented by the Mid-America Heart Institute of Saint Luke's Hospital and Cardiovascular Consultants, Inc. Contact: Beth Paul CME Office, St. Luke's Hospital of Kansas City, Warnall Raod at 44th, Kansas City, MO. 64111. 816/932-2301

7 New Perspectives in the Management of Myocardial Ischemia — Location: Ritz-Carlton of Kansas City, Kansas City, MO. Contact: Monica Scheierman, University of Kansas Medical Center, Office of Continuing Education/SC100, Rainbow and Olathe Blvds., Kansas City, KS 66103. 913/588-4490.

9 City-Wide Radiology Conference by Michael T. Modic, M.D., "Degenerative Disk Disease and Low Back Pain," —Location: Mallinckrodt Institute of Radiology, St. Louis, MO. Contact: R. Gilbert Jost, M.D., Chief of Diagnostic Radiology, Mallinkcrodt Institute of Radiology, 510 S. Kingshighway, St. Louis, MO 63110. 314/362-7130.

10 - 12 Introduction to Doppler Echocardiography — Location: St. Louis University Medical Center, St. Louis, MO. Contact: CME Office, St. Louis University Medical Center, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

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13 Postgraduate Symposium on Infectious Diseases — Location: Hyatt Regency Hotel, Kansas City, MO. Contact: Monica Scheierman, University of Kansas Medical Center, Office of Continuing Education/SC100, Rainbow and Olathe Blvds., Kansas City, KS 66103. 913/588-4490.

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7 - 8 Transesophageal Echocardiography Course - Location: Saint Louis University Medical Center ter. Contact: CME Office, Saint Louis University Medical Center, 1402 S. Grand Blvd., St. Louis, MO 63104. 1/800/553-2712.

13 City-Wide Radiology Conference — Location: St. Louis University, St. Louis, MO. Contact: R. Gilbert Jost, M.D., Chief of Diagnostic Radiology, Mallinckrodt Institute of Radiology, 510 S. Kingshighway, St. Louis, MO 63110. 314/362-7130.

16 - 18 American Academy of Pain Medicine's 1992 Annual Conference — Location: Registry Hotel, Scottsdale, AZ. Contact: Carol Endicott, American Academy of Pain Medicine, 5700 Old Orchard Rd., First Floor, Skokie, IL 60077-1024. 708/966-9510.

20 - 24 The Medicolegal Death Investigator Training Course - Location: Margaret McCormick Doisy Learning Resources Center, Contact CME Office, St. Louis University Medical Center, 1412 S. Grand Blvd., St. Louis, MO 63104. 314/577-8167.

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7 - 8 Midwinter Laser Course & Fluorescein Angiography Workshop — Location: Hyatt Regency Hotel, St. Louis, MO. Contact: Leigh Dundon, Suite 17413 - East Pavilion, One Barnes Hospital Plaza, St. Louis, MO 63110. 314/367-1181 or FAX: 314/367-5764.

10 6th Annual Daniel R. Biello Memorial Lecture by Robert O. Bonow, M.D., "Evaluation of Myocardial Viability," — Location: Mallinckrodt Institute of Radiology, St. Louis, MO. Contact: R. Gilbert Jost, M.D., Chief of Diagnostic Radiology, Mallinckrodt Institute of Radiology, 510 S. Kingshighway, St. Louis, MO 63110. 314/362-7130.

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*Most patients experience pain relief with the first dose.

See adjacent page for references and brief summary of prescribing information.

NZ-2943-B-149347

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AXID® (nizatidine capsules)

Brief Summary. Consult the package insert for complete prescribing information.
Indications and Usage: 1 *Active duodenal ulcer*—for up to 8 weeks of treatment. Most patients heal within 4 weeks.

2. *Maintenance therapy*—for healed duodenal ulcer patients at a reduced dosage of 150 mg h.s. The consequences of therapy with Axid for longer than 1 year are not known

Contraindications: Known hypersensitivity to the drug. Because cross sensitivity in this class of compounds has been observed, H_2-receptor antagonists, including Axid, should not be administered to patients with a history of hypersensitivity to other H_2-receptor antagonists.

Precautions: *General*—1. Symptomatic response to nizatidine therapy does not preclude the presence of gastric malignancy.

2. Dosage should be reduced in patients with moderate to severe renal insufficiency

3. In patients with normal renal function and uncomplicated hepatic dysfunction, the disposition of nizatidine is similar to that in normal subjects.

Laboratory Tests—False-positive tests for urobilinogen with Multistix® may occur during therapy

Drug Interactions—No interactions have been observed with theophylline, chlordiazepoxide, lorazepam, lidocaine, phenytoin, and warfarin. Axid does not inhibit the cytochrome P-450 enzyme system; therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin daily, increased serum salicylate levels were seen when nizatidine, 150 mg b.i.d., was administered concurrently.

Carcinogenesis, Mutagenesis, Impairment of Fertility—A 2-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a 2-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high-dose males as compared with placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups. The rate of hepatic carcinoma in the high-dose animals was within the historical control limits seen for the strain of mice used The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement as compared with concurrent controls and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given an excessive and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery are not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, mouse lymphoma assay, chromosome aberration tests, and a micronucleus test.

In a 2-generation, perinatal and postnatal fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny

Pregnancy—Teratogenic Effects—Pregnancy Category C—Oral reproduction studies in rats at doses up to 300 times the human dose and in Dutch Belted rabbits at doses up to 55 times the human dose revealed no evidence of impaired fertility or teratogenic effect; but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in 1 fetus, and at 50 mg/kg, it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in 1 fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers—Studies in lactating women have shown that 0.1% of an oral dose is secreted in human milk in proportion to plasma concentrations. Because of growth depression in pups reared by treated lactating rats, a decision should be made whether to discontinue nursing or the drug, taking into account the importance of the drug to the mother.

Pediatric Use—Safety and effectiveness in children have not been established.

Use in Elderly Patients—Healing rates in elderly patients were similar to those in younger age groups as were the rates of adverse events and laboratory test abnormalities. Age alone may not be an important factor in the disposition of nizatidine Elderly patients may have reduced renal function.

Adverse Reactions: Clinical trials of varying durations included almost 5,000 patients. Among the more common adverse events in domestic placebo-controlled trials of over 1,900 nizatidine patients and over 1,300 on placebo, sweating (1% vs 0.2%), urticaria (0.5% vs <0.01%), and somnolence (2.4% vs 1.3%) were significantly more common with nizatidine. It was not possible to determine whether a variety of less common events were due to the drug.

Hepatic—Hepatocellular injury (elevated liver enzyme tests or alkaline phosphatase) possibly or probably related to nizatidine occurred in some patients. In some cases, there was marked elevation (>500 IU/L) in SGOT or SGPT and, in a single instance, SGPT was >2,000 IU/L. The incidence of elevated liver enzymes overall and elevations of up to 3 times the upper limit of normal, however, did not significantly differ from that in placebo patients. All abnormalities were reversible after discontinuation of Axid. Since market introduction, hepatitis and jaundice have been reported. Rare cases of cholestatic or mixed hepatocellular and cholestatic injury with jaundice have been reported with reversal of the abnormalities after discontinuation of Axid

Cardiovascular—In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in 2 individuals administered Axid and in 3 untreated subjects.

CNS—Rare cases of reversible mental confusion have been reported.

Endocrine—Clinical pharmacology studies and controlled clinical trials showed no evidence of antiandrogenic activity due to nizatidine. Impotence and decreased libido were reported with equal frequency by patients on nizatidine and those on placebo Gynecomastia has been reported rarely

Hematologic—Fatal thrombocytopenia was reported in a patient treated with nizatidine and another H_2-receptor antagonist. This patient had previously experienced thrombocytopenia while taking other drugs Rare cases of thrombocytopenic purpura have been reported

Integumental—Sweating and urticaria were reported significantly more frequently in nizatidine- than in placebo-treated patients. Rash and exfoliative dermatitis were also reported

Hypersensitivity—As with other H_2-receptor antagonists, rare cases of anaphylaxis following nizatidine administration have been reported Rare episodes of hypersensitivity reactions (eg, bronchospasm, laryngeal edema, rash, and eosinophilia) have been reported.

Other—Hyperuricemia unassociated with gout or nephrolithiasis was reported Eosinophilia, fever, and nausea related to nizatidine have been reported.

Overdosage: Overdoses of Axid have been reported rarely If overdosage occurs, activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy Renal dialysis does not substantially increase clearance of nizatidine due to its large volume of distribution.

PV 2091 AMP
[091190]

References
1. Data on file, Lilly Research Laboratories
2. *Scand J Gastroenterol* 1987;22(suppl 136):61-70.
3. *Scand J Gastroenterol.* 1987;22(suppl 136) 47-55.
4. *Am J Gastroenterol* 1989;84:769-774

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MEDICAL SCHOOL NEWS

St. Louis University

■ **John E. Morley**, M.D., Dammert professor of gerontology in the department of internal medicine and director of the division of geriatric medicine, St. Louis University School of Medicine, has been awarded a three-year $299,488 grant from the John A. Hartford Foundation of New York City in support of a project titled "Academic Geriatrics Recruitment Initiative."

The awarding of the grant places St. Louis University School of Medicine among 14 universities nationwide that have been designated by the prestigious foundation as national resource centers for geriatric training. The grant will be used to educate medical students, medical residents, and junior faculty in the care of older adults.

The John A. Hartford Foundation is a private philanthropy established in 1929 by the former chief executive of the Great Atlantic & Pacific Tea Company. Since 1979, the Foundation has focused its support on improving the quality and financing of health care and assisting the health care system to accommodate the nation's aging population.

■ **Raj Nakra**, M.D., associate professor of psychology and human behavior at St. Louis University School of Medicine, has received two research grants totalling $153,330 for two projects to study the drug Sertraline. The grants will fund research into the use of Sertraline to treat OCD and panic disorders. St. Louis University is one of eight medical centers participating in the trials.

■ The department of otolaryngology at St. Louis University School of Medicine is using injections of botulinum toxin to control a vocal disorder known as spastic dysphonia. The injections have proven successful in controlling the symptoms of spastic dysphonia and are done in the doctor's office on an outpatient basis.

■ Researchers at St. Louis University School of Medicine say a new type of medication inhaler appears to be more effective and much easier to use than standard pressurized spray can inhalers in treating asthmatics. The Turbuhaler is being tested with a new type of cortisone drug called Budesonide in 25 centers across the country.

Raymond G. Slavin, M.D., professor of internal medicine and director of the division of allergy and immunology at St. Louis University School of Medicine, and allergy division colleague **Mark Dykewicz**, M.D., assistant professor of internal medicine, are testing Turbuhaler in a major cortisone drug study funded by a one-year, $75,600 grant from Asta-Draco Pharmaceuticals, manufacturers of the Turbuhaler.

Dr. Slavin said up to one-third of all asthmatics are using sprays with cortisone-like medications to avoid certain side effects associated with cortisone pills.

■ **John H. Gladney**, M.D., professor of otolaryngology, St. Louis School of Medicine, was awarded the Stellar Achievement Award at the 1991 St. Louis American Salute to Excellence Community Awards Banquet held September 5.

The award honors outstanding African-Americans. Dr. Gladney was recognized for his 35 years of service to the community as an otolaryngologist.

Dr. Gladney has a special interest in hearing loss in children and adults. In 1973, he was awarded a grant by the American Diabetes Association, St. Louis Affiliate, to conduct research related to diabetes and the inner ear. He helped to establish the Comprehensive Sinus Clinic at St. Louis University Medical Center in 1988. The clinic combines the skills of otolaryngologists and allergy/immunologists to diagnose and treat sinusitis.

Dr. Gladney served as interim chairman of the department of otolaryngology in 1987 and president of the St. Louis University Hospital medical staff in 1970. He is past president of both the St. Louis ENT Club (1978) and the Missouri ENT Association (1977-79).

■ **Jerry D. Gardner**, M.D., has been named professor and associate chairman of the department of internal medicine, St. Louis University School of Medicine. Dr. Gardner will be responsible for the department's research programs, take part in administrative matters, pursue his own research projects and be active in the teaching programs. His primary research interest is the role of intracellular communication of chemical messengers in altering cell function.

Dr. Gardner came to St. Louis from the National Institutes of Health where he was chief of the Digestive Diseases Branch of the National Institute of Diabetes and digestive and Kidney diseases since 1977. He also served as the Institute's chief of the Section on Gastroenterology since 1973. He has been professor of internal medicine at Georgetown University since 1985.

■ **Joseph A. Crapotta**, M.D., has joined the faculty of St. Louis University School of Medicine as an assistant professor of ophthalmology.

Dr. Crapotta's specialty lies in diseases of the retina and vitreous, and complicated retinal detachment surgery, specifically, cytomegalovirus retinitis in patients with aids. He has conducted research concerning ocular antiviral medications, intraocular fluids and vitreoretinal surgery.

Dr. Crapotta earned his medical degree in 1985 from New York Medical College in Valhalla, and completed his fellowship training in vitreoretinal surgery at the University of California at San Diego.

Washington University

■ **Matthew Schreiber**, a second year medical student at Washington University School of Medicine in St. Louis, has been named the first Flance Medical Scientist Trainee in the school's Medical Scientist Training Program.

The newly established scholarship was made possible through a $150,000 gift from the Harry Edison Foundation, an independent organization incorporated in 1949 that supports higher education, social services and medical research.

The scholarship will support Schreiber throughout his MSTP training, where after six years of study he will graduate with a combined M.D., Ph.D., degree. A Phi Beta Kappa graduate of Oberlin College, Scheiber received a bachelor's degree in psychology and has had extensive undergraduate research experience.

University of Missouri - Columbia

■ St. Luke's Hospital of St. Louis and the University of Missouri - Columbia School of Medicine have established a teaching affiliation that provides for the exchange of faculty and resident physicians between the two institutions. The affiliation, which became effective September 1, involves the departments of internal medicine, and is an expansion of the joint cardiology fellowship program the two institutions have offered since 1989.

Some St. Luke's physicians will receive adjunct faculty appointments at MU.

Internal medicine residents at St. Luke's Hospital currently care for patients at the Chesterfield facility and at St. Louis Regional Medical Center.

Karl T. Weber, M.D., chairman of MU's department of internal medicine, said the affiliation strengthens the University's program by broadening a resident physician's training options. He said the program eventually may be expanded to include medical students and other departments.

In addition to the two St. Louis area hospitals, residents treat patients at three Columbia hospitals: University Hospital and Clinics, Ellis Fischel Cancer Center, and Harry S. Truman Memorial Veterans' Hospital.

■ **Scott W. Snyder**, M.D., assistant professor of obstetrics and gynecology, has been awarded a new five-year, $413,100 grant from the National Institute of Child Health and Human Development. His research will focus on the possible role that endotoxin play in premature birth.

University of Missouri - Kansas City

■ To celebrate its 20th anniversary, the UMKC School of Medicine is hosting a reception December 7 at the Kansas City Museum. Alumni, faculty, staff, and friends are invited to attend.

■ The August 21st issue of The Journal of the American Medical Association includes an article by **Dennis L. Breo** on "E. Grey Dimond, M.D. - the 'Counterculture' medical educator." Breo's article touches on Dr. Dimond's life, his medical training, his role in shaping the American College of Cardiology and his design for a new medical school program, realized at UMKC.

■ **David Hayes**, M.D., a 1976 alumnus, received the University of Missouri - Kansas City's Alumnus of the Year Award in September. It is the first time a School of Medicine alumnus has received the honor, presented to someone who has earned a national reputation in contributing significantly to education, science, the arts or human welfare. Dr. Hayes is a consultant in cardiovascular diseases and internal medicine at the Mayo Clinic where he also is director of pacemaker services and associate professor of medicine for the Mayo Graduate School of Medicine.

■ **Wolfe Gerecht**, M.D., a 1980 alumnus, received the 1991 E. Grey Dimond, M.D., Take Wing Award. A committee of alumni selected Dr. Gerecht. He is an infectious disease specialist at the Ferrell-Duncan

Clinic in Springfield, MO. He also does consultations at the Federal Penitentiary Medical Center, where federal prisoners with active AIDS receive care.

■ **Chris Sirridge**, M.D., a docent and assistant professor of medicine in the hematology/oncology section, received the medical school's Alumni Achievement Award in September. Dr. Sirridge, a 1976 alumnus of the school, did a residency in internal medicine at the Cleveland Clinic. He completed a fellowship in hematology/oncology at the Mayo Clinic before returning to UMKC. The award recognizes alumni from each academic unit at UMKC who have given outstanding service to the community and earned a local or national reputation.

■ **Stuart Munro**, M.D., assistant professor of psychiatry and assistant dean for Year-1 and -2 Affairs, was elected president of the Missouri Psychiatric Society in May. He also gave presentations on "Panic Disorders" to the Oklahoma Academy of Family Physicians in June and to the Kansas Academy of Family Physicians in August.

■ **Mark Bernhardt**, M.D., clinical assistant professor of orthopedic surgery, presented "A Comparison of Percutaneous Discectomy and Laminotomy and Discectomy" at the American Orthopaedic Association annual meeting in June. He also wrote "Fetal Irradiation: A Complication of Percutaneous Discectomy," published in *Spine*.

■ **Steven D. Waldman**, M.D., clinical professor of anesthesiology, was a guest lecturer at the Colorado Society of Anesthesiologists Annual Meeting in Vail, July 28-29. He also has been appointed a coeditor of Analgesiafile and wrote a chapter on "Issues in the Selection of Local Anesthetics" for *Hospital Formulary*.

■ **Sandra Willsie Ediger**, D.O., a docent and assistant professor of medicine, recently co-wrote "A Review of Continuous Nebulization of Beta-Agonists in Status Asthmaticus" in *Annals of Allergy*.

■ **Dr. Willsie Ediger, Gary Salzman**, M.D., docent and associate professor of medicine and assistant dean for curriculum, and **Dan Whitman**, M.D., docent and associate professor of medicine, recently were awarded Fellowships in the American College of Physicians.

■ **Dr. Sirridge** received an alumni Achievement Award from Mortar Board, announced at its recent national conference in atlanta. In May she gave presentations on "Disseminated Intravascular Coagulation" and "Hypercoagulability" for hemostasis seminars at Ortho Pharmaceutical and Instrumentation Laboratories in Kansas City.

■ **Christopher Papasian**, M.D., associate professor of pathology, and **Lawrence Dall**, M.D., docent and associate professor of medicine, co-wrote "Alcaligenes Xylosoxidans Subspecies Xylosoxidans Empyema: Case Report and Review of Literature," to be published in *The Canadian Journal of Infectious Diseases*.

■ **Dr. Dall** also co-wrote an article, "Bronchiolitis Obliterans Organizing Pneumonia Associated with Cryptococcus Neoformans," to be published in *Reviews of Infectious Diseases*.

■ **Dr. Dall and James Standford**, M.D., docent and assistant professor of medicine, co-wrote "Invasive Polymycotic Pneumonia in an Uncontrolled Diabetic," published in *Archives of Pathology and Laboratory Medicine*.

■ **Dr. Dall and Betty Herndon**, Ph.D., a research assistant professor of medicine, are among doctors who received a Sarah Morrison Grant to study the "Association of Slime Production and Pathogenicity of Staphylococcus Epidermidis." Drs. Dall and Herndon also received a grant from the American Heart Association to study "Glycocalyx: Role in Streptococcal Endocarditis."

■ **Dr. Herndon, Dr. Kragel, Dr. Willsie Ediger** and **George Reisz**, M.D., docent and associate professor of medicine, received a Sarah Morrison Research Fund grant to study "Mechanisms of Lung Injury in Distant - Ischemia Reprofusion."

■ **Dr. Kragel, Jill Moormeier**, M.D., docent and assistant professor of medicine, **Loretta Loftus**, M.D., docent and associate professor of medicine and assistant dean of curriculum, **Paul Rothberg**, Ph.D., associate professor of pediatrics, and **Albert Leyva**, Ph.D., professor of pediatrics, were awarded a Sarah Morrison Research Fund grant to study "Racial Differences in Breast Cancer: Clinical, Pathologic and Biologic."

■ **Dan Gurba**, M.D., clinical assistant professor in orthopedic surgery, was the chairman and a presenter for the Total Knee Arthroplasty Conference at Saint Luke's Hospital in June. He also was a moderator for the Science of Hydroxyapatite Conference at Saint Luke's Hospital in June.

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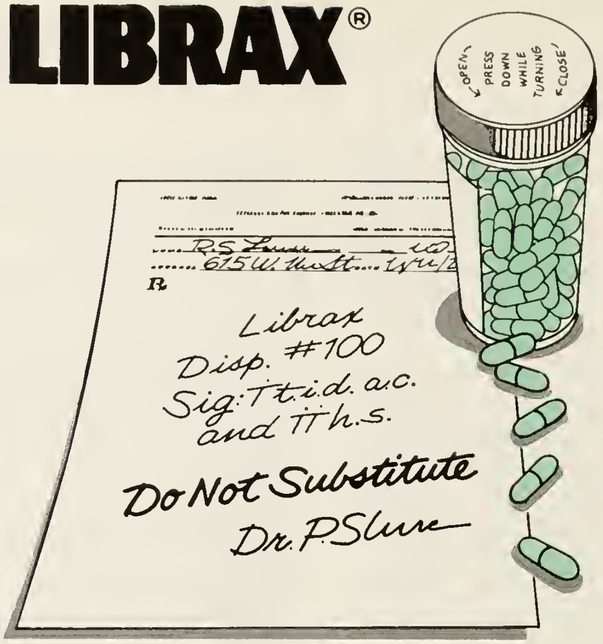

Each capsule contains 5 mg chlordiazepoxide HCl and 2.5 mg clidinium bromide.

Please consult complete prescribing information, a summary of which follows:

Indications: Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:
"Possibly" effective: as adjunctive therapy in the treatment of peptic ulcer and in the treatment of the irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.
Final classification of the less-than-effective indications requires further investigation.

Contraindications: Glaucoma; prostatic hypertrophy, benign bladder neck obstruction; hypersensitivity to chlordiazepoxide HCl and/or clidinium Br.
Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants, and against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving).

Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy. Advise patients to discuss therapy if they intend to or do become pregnant.

As with all anticholinergics, inhibition of lactation may occur.
Withdrawal symptoms of the barbiturate type have occurred after discontinuation of benzodiazepines (see Drug Abuse and Dependence).
Precautions: In elderly and debilitated, limit dosage to smallest effective amount to preclude ataxia, oversedation, confusion (no more than 2 capsules/day initially; increase gradually as needed and tolerated). Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider pharmacology of agents, particularly potentiating drugs such as MAO inhibitors, phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions reported in psychiatric patients. Employ usual precautions in treating anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship not established. Inform patients to consult physician before increasing dose or abruptly discontinuing this drug.
Adverse Reactions: No side effects or manifestations not seen with either compound alone reported with Librax. When chlordiazepoxide HCl is used alone, drowsiness, ataxia, confusion may occur, especially in elderly and debilitated; avoidable in most cases by proper dosage adjustment, but also occasionally observed at lower dosage ranges. Syncope reported in a few instances. Also encountered: isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent, generally controlled with dosage reduction; changes in EEG patterns may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice, hepatic dysfunction reported occasionally with chlordiazepoxide HCl, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax typical of anticholinergic agents, *i.e.*, dryness of mouth, blurring of vision, urinary hesitancy, constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.
Drug Abuse and Dependence: Withdrawal symptoms similar to those noted with barbiturates and alcohol have occurred following abrupt discontinuance of chlordiazepoxide; more severe seen after excessive doses over extended periods; milder after taking continuously at therapeutic levels for several months. After extended therapy, avoid abrupt discontinuation and taper dosage. Carefully supervise addiction-prone individuals because of predisposition to habituation and dependence.

Revised: February 1988

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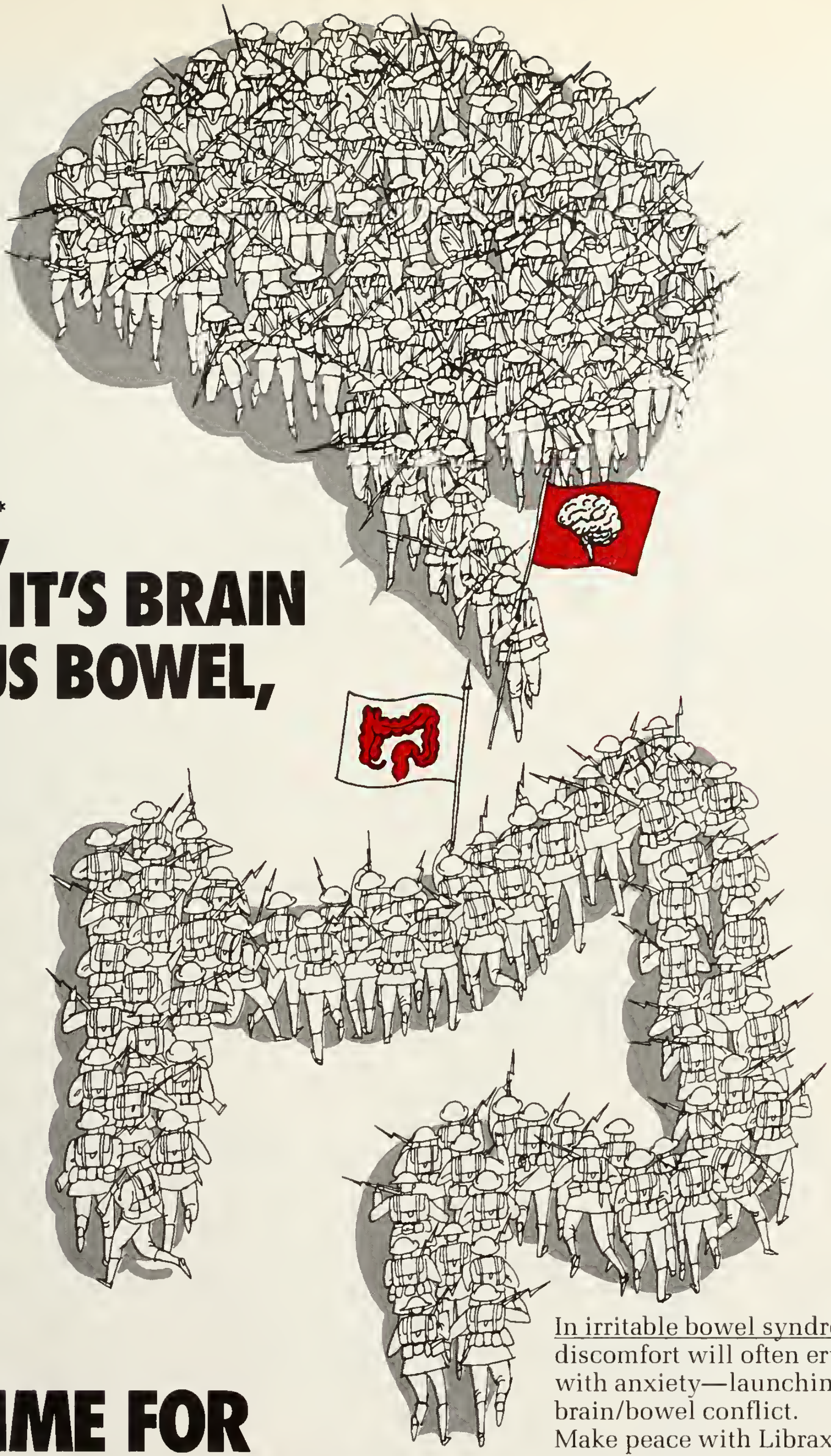

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References should be cited in numerical order in the text and arranged at the end of the article in the same order in which they are cited. The reference should give name of author, title of article, name of periodical, volume number, initial page number and year. Authors are responsible for reference accuracy.

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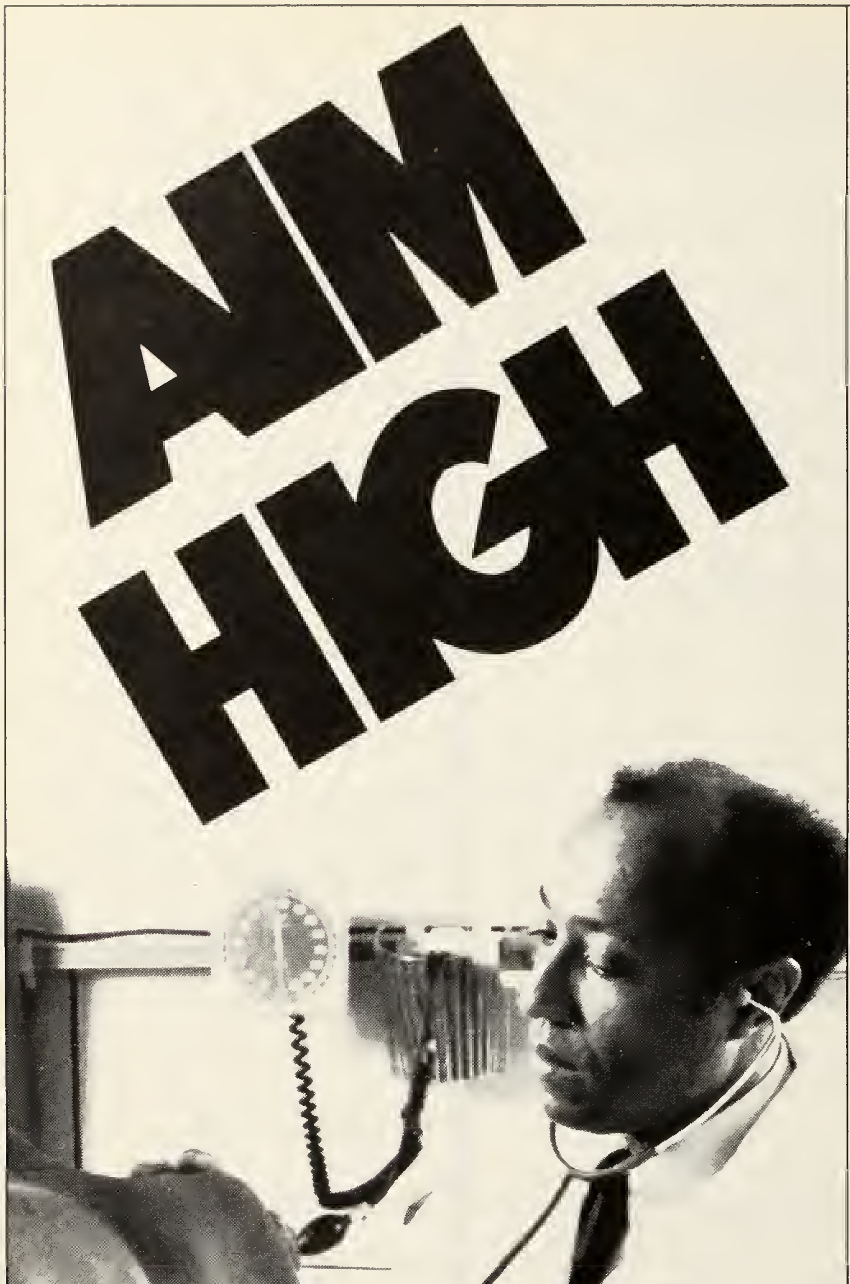

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Contraindications: Severe LV dysfunction (see *Warnings*), hypotension (systolic pressure < 90 mm Hg) or cardiogenic shock, sick sinus syndrome (if no pacemaker is present), 2nd- or 3rd-degree AV block (if no pacemaker is present), atrial flutter/fibrillation with an accessory bypass tract (eg, WPW or LGL syndromes), hypersensitivity to verapamil.

Warnings: Verapamil should be avoided in patients with severe LV dysfunction (eg, ejection fraction < 30%) or moderate to severe symptoms of cardiac failure and in patients with any degree of ventricular dysfunction if they are receiving a beta-blocker. Control milder heart failure with optimum digitalization and/or diuretics before Calan SR is used. Verapamil may occasionally produce hypotension. Elevations of liver enzymes have been reported. Several cases have been demonstrated to be produced by verapamil. Periodic monitoring of liver function in patients on verapamil is prudent. Some patients with paroxysmal and/or chronic atrial flutter/fibrillation and an accessory AV pathway (eg, WPW or LGL syndromes) have developed an increased antegrade conduction across the accessory pathway bypassing the AV node, producing a very rapid ventricular response or ventricular fibrillation after receiving I.V. verapamil (or digitalis). Because of this risk, oral verapamil is contraindicated in such patients. AV block may occur (2nd- and 3rd-degree, 0.8%). Development of marked 1st-degree block or progression to 2nd- or 3rd-degree block requires reduction in dosage or, rarely, discontinuation and institution of appropriate therapy. Sinus bradycardia, 2nd-degree AV block, sinus arrest, pulmonary edema and/or severe hypotension were seen in some critically ill patients with hypertrophic cardiomyopathy who were treated with verapamil.

Precautions: Verapamil should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of overdosage. Verapamil may decrease neuromuscular transmission in patients with Duchenne's muscular dystrophy and may prolong recovery from the neuromuscular blocking agent vecuronium. It may be necessary to decrease verapamil dosage in patients with attenuated neuromuscular transmission. Combined therapy with beta-adrenergic blockers and verapamil may result in additive negative effects on heart rate, atrioventricular conduction and/or cardiac contractility; there have been reports of excessive bradycardia and AV block, including complete heart block. The risks of such combined therapy may outweigh the benefits. The combination should be used only with caution and close monitoring. Decreased metoprolol and propranolol clearance may occur when either drug is administered concomitantly with verapamil. A variable effect has been seen with combined use of atenolol. Chronic verapamil treatment can increase serum digoxin levels by 50% to 75% during the first week of therapy, which can result in digitalis toxicity. In patients with hepatic cirrhosis, verapamil may reduce total body clearance and extrarenal clearance of digitoxin. The digoxin dose should be reduced when verapamil is given, and the patient carefully monitored. Verapamil will usually have an additive effect in patients receiving blood-pressure-lowering agents. Disopyramide should not be given within 48 hours before or 24 hours after verapamil administration. Concomitant use of flecainide and verapamil may have additive effects on myocardial contractility, AV conduction, and repolarization. Combined verapamil and quinidine therapy in patients with hypertrophic cardiomyopathy should be avoided, since significant hypotension may result. Concomitant use of lithium and verapamil may result in a lowering of serum lithium levels or increased sensitivity to lithium. Patients receiving both drugs must be monitored carefully. Verapamil may increase carbamazepine concentrations during combined use. Rifampin may reduce verapamil bioavailability. Phenobarbital may increase verapamil clearance. Verapamil may increase serum levels of cyclosporin. Verapamil may inhibit the clearance and increase the plasma levels of theophylline. Concomitant use of inhalation anesthetics and calcium antagonists needs careful titration to avoid excessive cardiovascular depression. Verapamil may potentiate the activity of neuromuscular blocking agents (curare-like and depolarizing); dosage reduction may be required. Adequate animal carcinogenicity studies have not been performed. One study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. Pregnancy Category C. There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor, and delivery only if clearly needed. Verapamil is excreted in breast milk; therefore, nursing should be discontinued during verapamil use.

Adverse Reactions: Constipation (7.3%), dizziness (3.3%), nausea (2.7%), hypotension (2.5%), headache (2.2%), edema (1.9%), CHF, pulmonary edema (1.8%), fatigue (1.7%), dyspnea (1.4%), bradycardia: HR < 50/min (1.4%), AV block: total 1°,2°,3° (1.2%), 2° and 3° (0.8%), rash (1.2%), flushing (0.6%), elevated liver enzymes, reversible non-obstructive paralytic ileus. The following reactions, reported in 1.0% or less of patients, occurred under conditions where a causal relationship is uncertain: angina pectoris, atrioventricular dissociation, chest pain, claudication, myocardial infarction, palpitations, purpura (vasculitis), syncope, diarrhea, dry mouth, gastrointestinal distress, gingival hyperplasia, ecchymosis or bruising, cerebrovascular accident, confusion, equilibrium disorders, insomnia, muscle cramps, paresthesia, psychotic symptoms, shakiness, somnolence, arthralgia and rash, exanthema, hair loss, hyperkeratosis, macules, sweating, urticaria, Stevens-Johnson syndrome, erythema multiforme, blurred vision, gynecomastia, galactorrhea/hyperprolactinemia, increased urination, spotty menstruation, impotence.

4/11/91 • P91CA6143V

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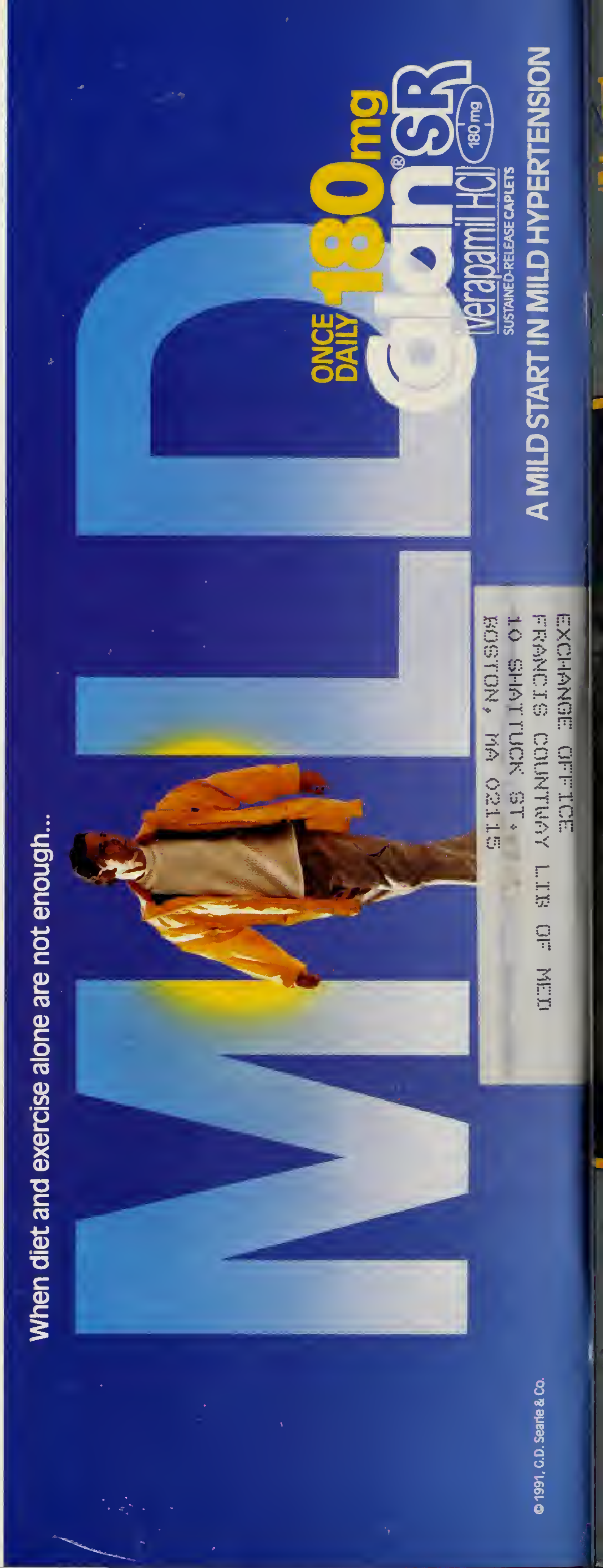
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Missouri Medicine

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Missouri Medicine

Journal of the Missouri State Medical Association

Vol. 88, No. 12 December 1991

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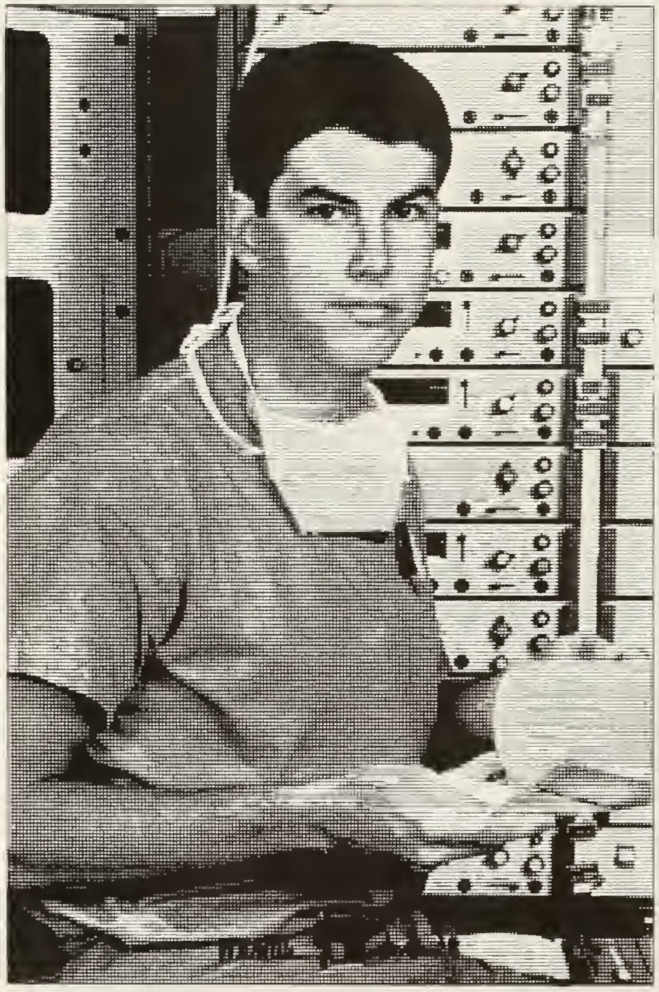

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GUEST EDITORIAL

by Paula J. Petroshak,
Kansas City, Missouri

Compliance with OSHA's Bloodborne Pathogen Standard recommends establishing an Infection Control Program

Understanding OSHA'S Bloodborne Pathogen Standard

In February of 1990, OSHA set forth procedures to enforce their previous guideline for protection from exposure to Hepatitis B (HBV) and Human Immunodeficiency Virus (HIV). In general, the procedures addressed were to minimize workers risks where their job involved potential exposure to blood or other potentially infectious materials.

OSHA currently considers many fluids as being linked to transmission of HBV or HIV viruses. Any material contaminated with blood that is to be discarded should be considered as a biohazard, including gauze wipes and microscopic slides unless you can prove that the fixative agent or process renders the pathogens completely harmless.

Other fluids that are currently considered as linked to the transmission of these viruses include: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, peritoneal fluid, pericardial fluid, amniotic fluid, and saliva in dental settings. Fluids that are currently not considered applicable are: feces, sweat, tears, urine, or vomitus unless they contain visible blood. Apparently urine containers are not considered biohazard material at this time, unless they contain visible blood.

OSHA Instruction CPL 2-2.44 sets forth current enforcement and interpretation procedures with respect to the protection of workers potentially exposed to blood or infectious materials. These requirements are being enforced under the general duty clause section 5(a)1 of the OSHA standards. The instruction will be superseded after the final standard on bloodborne pathogens is promulgated.

In general, the Instruction recommends establishing an Infection Control Program (ICP) to reduce worker risk by minimizing or eliminating employee exposure incidents to infectious disease hazards. Such a program should include the following components.

Exposure Determination
Control Methods
    A. Universal Precautions
    B. Engineering Controls
    C. Work Practice Controls
    D. Personal Protection Equipment
HBV Vaccination
Post Exposure Evaluation and Follow-up
Infectious Waste Disposal
Tags, Labels, and Bags
Housekeeping Practices
Laundry Practices
Training and Education of Employees
Record-keeping

The employer should identify all potentially exposed employees and make an exposure determination without regard to personal protective equipment.

The term Universal Precautions refers to treating all blood and other potentially infectious materials as being contaminated with the HBV or HIV virus.

Engineering controls refers to the use of available technology and devices to isolate or remove hazards from the worker. These would

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Guest Editorial

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include but not be limited to puncture-resistant sharps containers, splash guards, mechanical pipetting, self-sheathing needles, or laboratory hoods.

Work Practice controls are alterations in the ways that tasks may normally be performed in an effort to protect the workers from know hazards. Considerations would include the immediate removal of personal protective equipment after leaving the contamination zone and placing it in containers for storage, disposal or laundering; washing of hands immediately after removal of gloves; used needles and other sharps should not be sheared, bent, broken, recapped, or resheathed by hand; and all procedures involving blood or other potentially infectious materials shall be performed to minimize splashing or spraying.

Personal protective equipment includes all specially designed clothing or equipment used to protect the worker from direct exposure to the contaminants. Employers shall provide and assure the use of this equipment which may include gloves, gowns, laboratory coats, fluid resistant aprons, head and foot coverings; face shields or masks and eye protection; pocket masks, mouthpieces, resuscitation bags, or other ventilation devices. **The employer shall also provide for cleaning, laundering, disposal, or replacement of defective equipment.** Surgical gloves shall be replaced when visibly soiled, or punctured, or when their integrity has been compromised. They shall not be washed or disinfected for re-use.

The HBV vaccination shall be offered, at no cost, to all employees whose jobs involve contacting blood or infectious agents.

Following an exposure incident the employer shall make available to the employee a confidential medical evaluation and follow-up, documenting the route of exposure and status of the source (patient). The source should be contacted in an attempt to obtain consent to collect and test the sources of blood for determining their HBV or HIV status. The employer should also offer follow-up testing of the exposed worker at six, twelve and twenty-four week periods after the initial exposure and periodically thereafter.

The guideline also discusses waste disposal; using puncture resistant sharps containers, leak-proof fluids containers, double bagging waste before handling and placing "BIOHAZARD" labels on containers and informing all employees on the meaning of the various labels as required under 1910.145.

In addition, the OSHA instruction covers housekeeping considerations, laundry practices, training of employees and record-keeping requirements. **Remember:** Needle-stick injuries must be included on the OSHA 200 form if medical treatment such as gamma globulin, hepatitis B immune globulin, or hepatitis vaccine is prescribed and administered by licensed medical personnel, or if the HIV or HBV case can be traced back to an exposure incident.

OSHA is enforcing this program aggressively with costly penalties. It pays to be prepared. ■

Editor's Note: *The author is a Health and safety Consultant for Compliance Coordinators, Inc., Kansas City, Missouri.*

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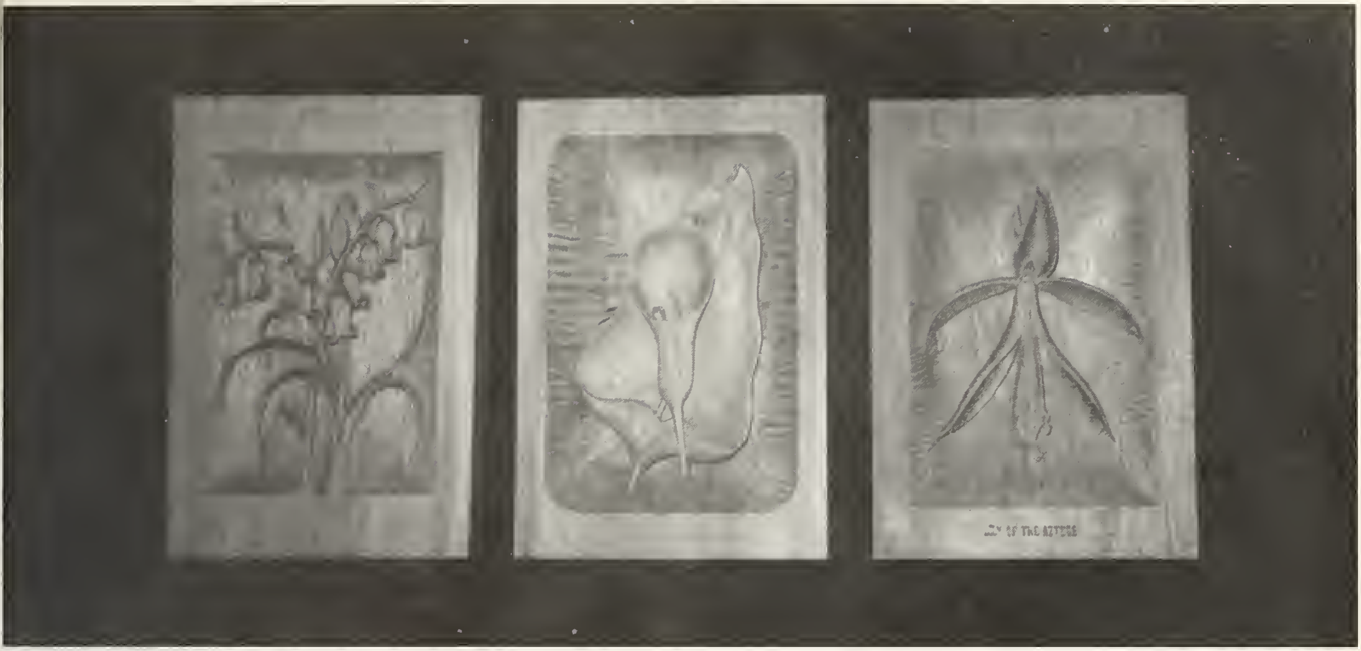
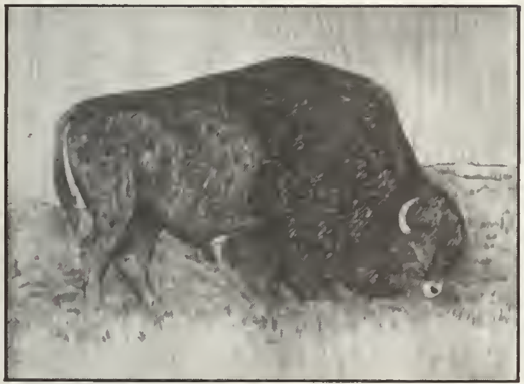


Floral Trilogy: Blue Bells, Calla Lily and Lily of the Aztecs

Holiday Carvings

Jerry H. Allen, M.D. of Springfield, Missouri proves that whittling can be an art form. Dr. Allen is a retired surgeon and he carves his finely detailed art work as "an escape from watching television".

Dr. Allen works in wood as a hobby and shares his work with friends and relatives as gifts for Christmas, birthdays, and anniversaries. Each piece reflects many hours of skilled craftsmanship. "Book Ends", for example, stands approximately 6 1/2" x 4 1/2" and required about 30 hours to finish.



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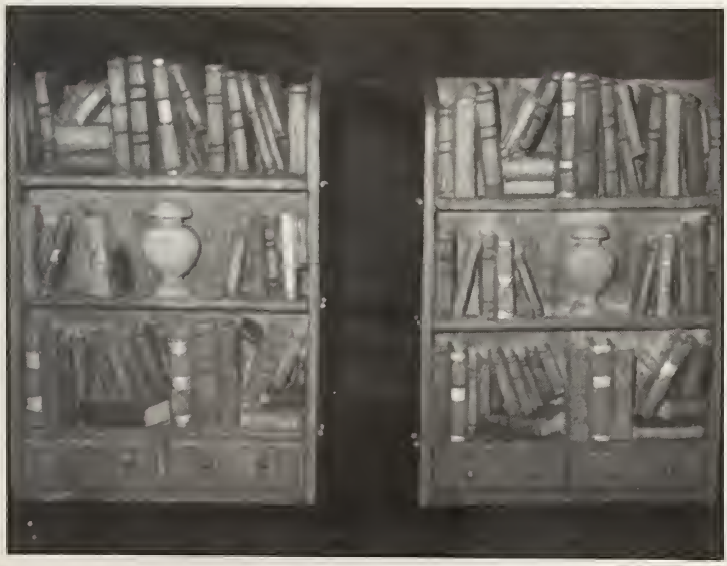
Book Ends



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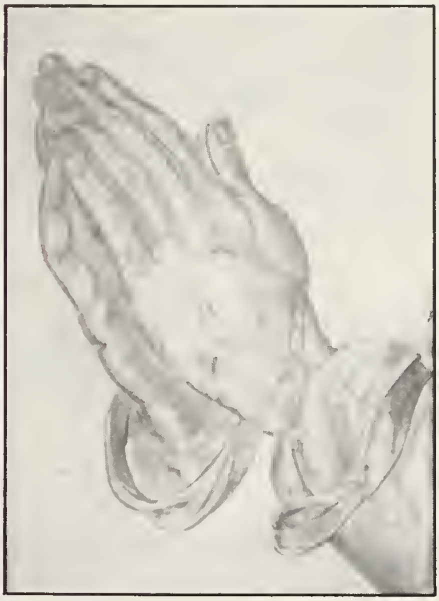
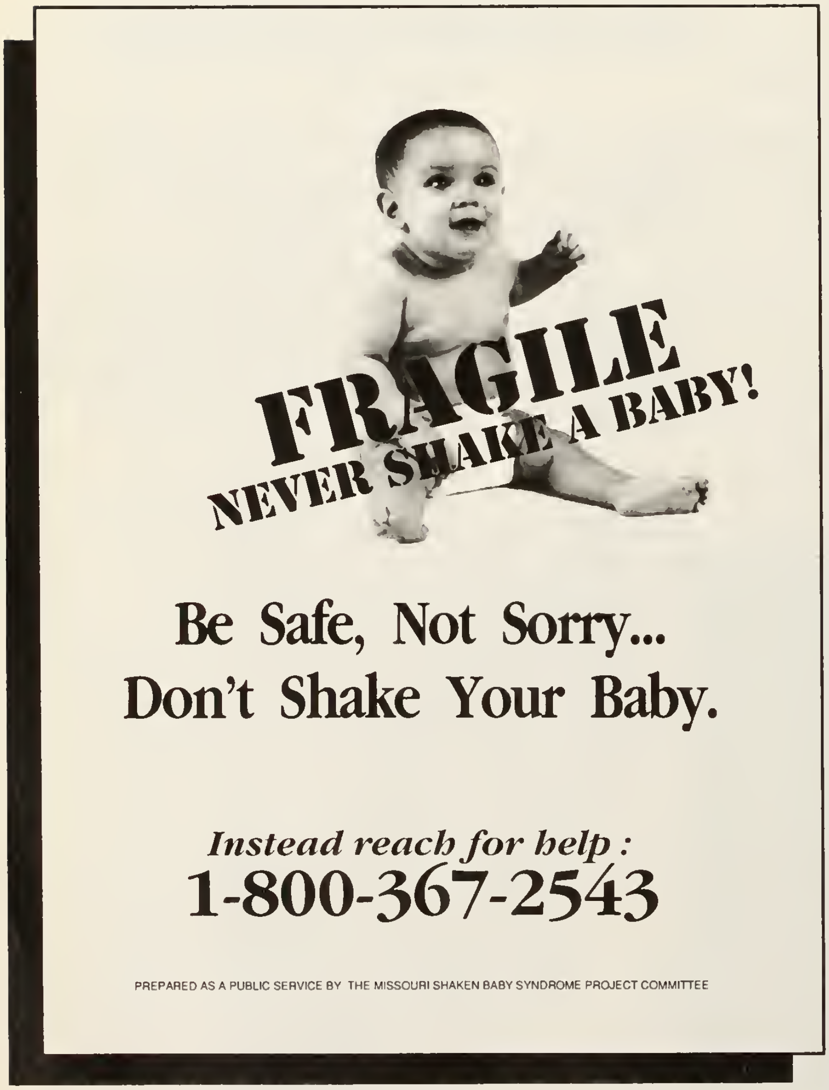


Shaken Baby Syndrome Information is Ready for Statewide Distribution

Posters and brochures calling attention to the Shaken Baby Syndrome are available now for distribution around the state. The project, a joint program involving the Missouri State Medical Association and Auxiliary and the Missouri Chapter of the National Committee for Prevention of Child Abuse and other sponsoring organizations, is designed to help educate the public on the hazards of shaking small children. The Shaken Baby Syndrome has been recognized as one of the most serious and yet preventable conditions of child abuse.

Through education, parents, sitters, and other child care providers can become aware of the dangers of shaking and learn to cope with the frustrations of caring for infants and young children. Posters and brochures for use on office bulletin boards and distribution to parents may be ordered by contacting Elizabeth Huffaker at 134 Pinehurst Est. Drive, St. Louis, Missouri 63141.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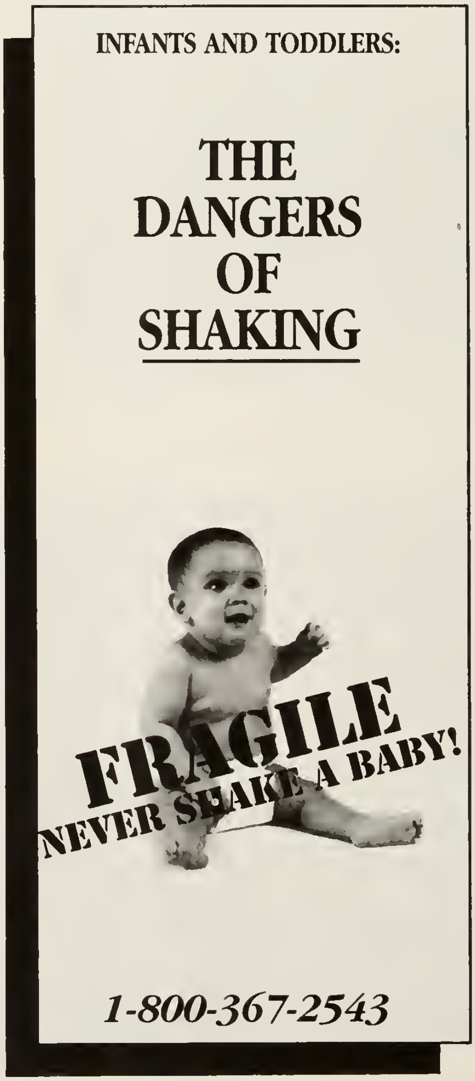
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EDITOR'S DESK

by Donald G. Sessions, M.D.
Editor

The Quality Of Care

These days there is great interest in the domain of the EFFECTIVENESS of medical and surgical care. This area of activity looks at how medical treatment is provided in specific contexts and its ultimate results (so-called outcomes research). There is much concern about how the QUALITY of medical care will be affected by rationing and payment reforms. However, there is little hard data regarding what represents high quality care.

In general, quality indicates an assessment of the performance provided compared to a "best" or "optimal" performance that is known to produce the greatest improvement in health and well-being recurrently. Quality is measured as the produced or realized fraction of what is achievable by the best physicians in the same or similar cases.[1] The "best" or "optimal" results are derived from criteria or standards of assessment produced from authoritative, sound, rigorous, and validated scientific funds of knowledge that can be utilized to compare to the treatment results being studied. It is expected that these criteria will change with new developments and patterns of care.

There is little written information regarding what is high quality surgery. Surgical care can be described as medical care of patients with diseases where surgery is known to produce the greatest improvement in health and well-being. Surgical skill can be assessed in several areas including technical performance that depends on knowledge, judgement, and facility in implementing care, and interpersonal performance that depends on the ability to communicate information acquired in technical performance regarding the disease state and its management in order to facilitate the patient's participation in the treatment process.

Current research attempts to identify parameters of care that are important in order to assess the quality of care. Donabedian[2] has pointed out a way to look at this in three specific areas: structure, process, and outcome.

1. Structural elements of the medical system include the following:

– The physician's training and experience including licensure and board certification, publications, and ability measured by the results of previous experience.

– The health care setting including the type of hospital (private or public [city, state, or federal]).

– The patient's demographics including name, age, sex, cultural origin, religion, job, and personal habits as well as socioeconomic status such as method of payment.

– The disease entity including primary symptoms, specific physical examination and laboratory results, the pathological diagnosis, clinical classification and staging, and measures of performance status.

– The purpose and goals of treatment: cure and/or palliation. Possible domains of assessment here include the patient's understanding and satisfaction with the current health care situation, the current life situation (well-being), the current status of the disease including functional disability, measures of quality of life, and expectations for survival.

The assessors here include the

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Editor's Desk

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patient and his/her family, the physician and other health care professionals, payors (insurors, government), and the community.

—Treatment alternatives utilizing accepted standards and criteria: standard or experimental or a combination of both. Discussion includes speculation regarding the maximal achievable benefit, what the patient might realistically expect, and regarding risks (including sequelae and complications) of each alternative.

2. The process includes specific treatment parameters suggested by the physician and the participation in the care by the patient.

—Medical treatment design requires a rigorous description of the recommended procedure including pre-treatment requirements that make the treatment appropriate, an informed choice of treatment alternative by the patient, treatment details including technical imperatives, and required post treatment studies (such as surgical pathology information) that might show the need for further treatment suggestions.

—Implementation of care by the patient: this can run the gamut from full coordination of action between the patient and the care giver to forms of less compliance such as early termination of treatment, breaks in treatment, refusal of treatment, non-cooperation, and transfer of care elsewhere.

3. Outcome can be measured in studies of hospital stay, completion of the recommended treatment plan, and the results of treatment.

—Hospital stay results can be measured in terms of duration (days), outliers requiring extended stay (such as complications), pathology parameters (requiring additional treatment), and further care itself.

—Completion of the treatment plan: includes any delay in treatment for any specific reason.

—Results of treatment: includes patient satisfaction with subsequent health situation (symptoms), life situation (well-being), status of disease, performance status (function and/or disability), survival, and the cost of care.

From the above it can be seen that the quality of medical care can be studied in a rigorous manner and with a high probability and possibility of producing hard data. The utility of identifying standard parameters (such as those with statistical significance), which are associated with a recurrently favorable outcome and that could thus be assessed as being of high quality, is obvious. Further, the required inclusion of these grounded parameters in the MEDICAL RECORD could allow an OBSERVER to see if the care rendered was appropriate in quality. At the same time it is apparent that to do this type of research will require a huge commitment in time, energy, and resources. It also should be apparent that without this type of research, ungrounded generalizations regarding the quality of care are meaningless.

1. Donabedian, A: The Quality of Care. *JAMA* 1988; 260: 1743-1748.
2. ibid.

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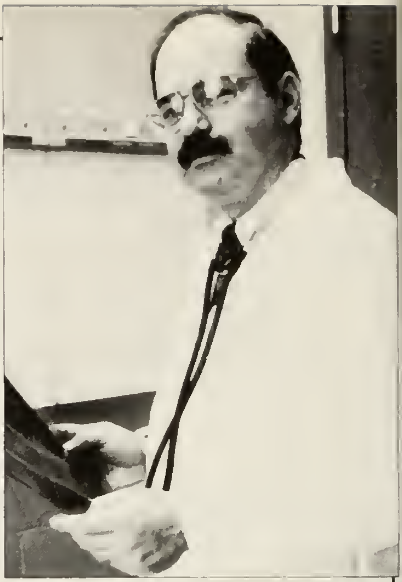

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by Janice K. Woerth, Ph.D.

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Or call her direct:
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Although your name will not be used in *Missouri Medicine*, please include your name and phone number so that Dr. Woerth may contact you if she needs additional information to answer your question.

Dear Dr. Woerth,

Can you explain how the Resource Based Relative Value Scale (RBRVS) that Medicare is implementing in 1992 will affect my reimbursement? I am a cardiologist.

Dr. P.P.

Dear Dr. P.P.,

The RBRVS will replace the current reimbursement system used by Medicare. Prior to 1992, Medicare's allowable payment for services rendered was based on either the fee you charged the day that the services was rendered, your customary charge (as printed on your Medicare profile), or the prevailing fee for your specialty in your geographic area (also printed on your Medicare profile). Whichever of these three fees was lowest was the amount that Medicare allowed for the service. Now Medicare's allowable will be based on the RBRVS.

The RBRVS is a fee for every medical service listed in CPT and in Medicare's own HCPCS codes. The amount of the fee was determined by a Relative Value Unit (RVU), made-up of the work involved in the procedure, the malpractice associated with the procedure, and the overhead expenses associated with the procedure. The RVU is multiplied by a conversion factor (a dollar amount) and a geographic factor to determine how much money will be paid by Medicare for the procedure. The dollar amount of the conversation factor was approved by Congress (as were all the rules that govern Medicare).

Because there is no longer a difference in payment to a physician for a procedure based on his/her medical specialty, it has been predicted that all specialties, except family practice and possibly internal medicine, will experience a decrease in Medicare reimbursement.

In 1992, the Medicare allowable for a geographic area is being calculated as follows. If the "historical payment", i.e., the weighted prevailing fees for all the specialties in the geographic area, is 85% to 115% of the RBRVS, the new allowable will be the RBRVS amount. If the "historical payment" is less than 85% of the RBRVS, the allowable will be the RBRVS amount plus 15%. If the "historical payment" is 116% or higher of the RBRVS, the allowable will be the RBRVS amount less 15%.

Your Medicare carrier will send you a profile listing these new allowable fees. The profile will also include the new Limiting Charges for non-participating physicians.

I know that this fee information is complicated but it exemplifies a quote from Cullen Hightower; "We may not imagine how our lives could be more frustrating and complex - but Congress can."

Dr. Woerth,

I understand that Medicare will be changing it's HCFA 1500 claim form. Can you give me more information about this?

G.M.

Dear G.M.,

Medicare has released a new version of the HCFA 1500 form. You should have received a copy of the form from your Medicare carrier. Carriers will start accepting the form in late 1991 or early 1992. It is required that all offices use the new form by April 1, 1992 or claims will not be paid. Thus, I am recommending to my clients that only enough old HCFA 1500 forms be purchased to get them through February or so. After that they can start using the new HCFA 1500 and, of course, will have to by April 1.

The new form has a more specific format. There are now separate boxes for the patient's street address, city/state/zip code, and telephone number. There is also a box for the referring physician's UPIN number. Some helpful changes have been made for reporting diagnostic and procedural coding information. The diagnostic code will now be listed first on a designated line with the decimal point included. No written description of the diagnosis will be needed. There is also a space on the form for CPT/HCPCS modifiers by the CPT/HCPCS code. ■

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Fusobacterium necrophorum Sepsis in a Six-Year-Old Girl

by Robert R. Jones, M.D.
Nevada, Missouri

Fusobacterium necrophorum is a long, slender, spear-shaped anaerobic pale-staining gram negative rod. It is one of two species of *Fusobacterium* most often identified in infections. *F. nucleatum* is much more common, but *F. necrophorum* is much more virulent.[1]

Infection with this organism most often begins with tonsillitis and through invasion of the bloodstream becomes a widespread metastatic infection. This may take the form of lung abscess, empyema, liver abscess, osteomyelitis, or purulent arthritis, as well as infections of the central nervous system and head and neck.

I report a very unusual case involving a bloodstream infection with *Fusobacterium necrophorum* in a 6-year-old girl, in whom there appeared to be incipient meningitis as well.

Case Report

A 6-year-old girl came to the emergency department of Nevada City Hospital because of a two-day history of nausea, vomiting, and fever. She had slept most of the previous day and had vomited several times. She complained of stomachache and headache, but no throat or ear pain. She had been treated two or three weeks previously with amoxicillin for an ear infection.

She appeared ill and fairly pale. Vital signs included a temperature of 102.7°, pulse 104, respirations 22, blood pressure 92/52 mm Hg, and weight 36 pounds. The right tympanic membrane was of normal appearance, but the left was inflamed. Her throat appeared normal. Examination of the neck revealed no lymphadenopathy, and her neck was fairly supple, but she did not allow full flexion without crying and flexing her hips and knees. The lungs were clear to auscultation. There was tachycardia, but no murmurs. Examination of the abdomen gave normal results. A diagnosis of left otitis media and possible sepsis was made.

Because of the patient's fever, lethargy, irritability, and ill appearance, a lumbar puncture was performed in the emergency department. Clear CSF was obtained and no organisms were seen on gram stain. Three RBCs and no WBCs were found. CSF glucose was 55 and protein 15. There was no growth on cultures. The CBC showed 28,000 WBCs, with 73 segs, 20 bands, 5 lymphs, and 1 mono. The hemoglobin was 9.9 and hematocrit 28.6. Platelet count was 452,000. Urinalysis was essentially normal. A chest x-ray film was not taken. Due to her condition, she was placed in the ICU and an intravenous infusion of cefotaxime was started after blood was drawn for culture.

On the second hospital day the child's only complaint was of some left ear pain. She still did not want to bend her neck, and appeared ill. On the following morning, the third hospital day, she complained of neck pain and had definite nuchal rigidity. The laboratory reported finding a possible gram negative rod on the blood culture. Lumbar puncture was repeated, and the CSF was slightly hazy with 63 WBCs (81% segs) and 102 RBCs. No organisms were seen on gram stain, and neither CSF culture had any growth. Blood culture grew *Fusobacterium necrophorum*, which was verified by the laboratory of the State Department of Health and the Centers for Disease Control in Atlanta, Ga. She remained febrile for four days and on the fifth hospital day could finally flex her neck. A 10-day course of IV cefotaxime was completed, and the patient recovered uneventfully.

Comment

Fusobacterium necrophorum sepsis in children is quite rare. Over a five-year period at Boston City Hospital, 26 patients were identified with this condition, but no children were among them.[2] *Fusobacterium* species have been implicated in amnionitis and premature labor.[3] Kleinman reported a case of necrotizing pneumonia caused by *F. necrophorum* in a child.[4] Embree and Law reported on multiple hepatic abscesses caused by this organism in a pediatric patient.[5] Eykyn reported on 45 cases of *Fusobacterium necrophorum* infection in children and adolescents from England and Wales, including some beginning with otitis.[6] Spencer, Slusher, and Sanders reported a case of sepsis with this organism in a 23-month- old girl that progressed to cerebral infarction.[7]

This patient's case was interesting in that she seemed to be on the verge of developing meningitis at the outset, and most certainly would have developed it or possibly a brain abscess if intravenous antibiotic therapy had not been instituted. One may question whether the initial lumbar puncture could have introduced the organism into the CSF, but this does not seem likely in view of the atraumatic tap.

The most important lesson from the case is that when a febrile child appears ill, it is important to do a thorough evaluation and to initiate therapy designed to effectively treat a wide range of pathogens in order to achieve a timely recovery and to avoid disaster.

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The Use of Alternative Therapies by HIV-Positive Patients Attending the St. Louis AIDS Clinical Trials Unit

by **Caroline Rowlands, M.D.,**
and **William G. Powderly, M.D.**
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Because there is no cure for infection with the human immunodeficiency virus (HIV), there is wide interest in alternative treatments. Much of the interest has been fostered by patient advocate organizations, which emphasize the need for patients to become active in their own care. The lay press has also focused attention on the use of alternative treatments by patients with AIDS,[1,2] particularly the potential exploitation of vulnerable patients. There is little information, however, in the medical literature on the types of alternative approaches taken by HIV-infected patients and how frequently they use such approaches.

Two studies have measured the use of alternative therapies by patients with AIDS hospitalized in Chicago[3] and HIV-infected outpatients in London.[4] These studies suggested that about one-third of patients had tried some form of alternative remedy. We were interested in determining whether the use of alternative treatments by patients in an NIH-supported AIDS Clinical Trial Unit was different since these patients had already taken a conventional approach to their care by becoming involved in government-sanctioned studies.

Methods

Seventy-nine HIV-positive subjects consented to be interviewed by a single interviewer (CR) about their involvement with alternative therapies. All were participating in outpatient clinical trials at the Washington University ACTU. The interview was conducted in confidence because the subjects may have felt that admitting to use of nonapproved therapies would jeopardize their continued participation in the trials. Each patient was asked to provide the following demographic and clinical information: age, race, sex, years of education, stage of disease (asymptomatic HIV infection, AIDS-related complex, or AIDS), and most recent CD4 lymphocyte count. They were asked whether they had tried any therapies not prescribed by a doctor or therapies prescribed in a way unapproved by the Food and Drug Administration. The patients were asked to exclude therapies that were part of an FDA-approved clinical trial and therapies they had taken regularly before they learned of their HIV-positivity. We sought specific information about the use of massage therapy, imagery or meditation, acupuncture or acupressure, vitamins and minerals, hypnosis, spiritual healing, herbal therapy, dietary regimens, ozone therapy, AL-721, oral interferon, compound Q, dextran sulfate, ribavirin, and isoprinosine. For each treatment they had used, patients were asked whether they believed the treatment had had an effect on their general well being or on their HIV-infection, what the therapy cost, how they heard about it, where it was obtained, from whom it was received, and whether their primary doctor was aware of its use.

The total cost of alternative therapy was calculated as a yearly expense and averaged to one year if it had been used for more than a year. Travel expenses were included if the patient had made a trip specifically to receive the treatment.

Results

Of the 79 patients interviewed, 75 were male and 4 were female; 70 were white, six black, and three Hispanic. The median age was 39 (range 25 - 73). The median number of years of education was 15 (range 8 - 27). Thirty-eight percent of the patients had been diagnosed with ARC and 16.5% with AIDS. The median T-helper lymphocyte count was 200 cells/mm^3.

Forty-four patients (56%) had tried at least one of 22 different categories of therapy, for a total of 103 treatments (Table 1). Eleven patients (13.9%) had tried drug therapies in a non-FDA-approved fashion, for a total of 16 drug treatments. Nine patients had taken experimental medications. One patient had taken high doses (>4800 mg/day) of oral acyclovir and another had tried parenteral interferon (obtained from a friend with Kaposi's sarcoma), without medical supervision. A total of 11 different vitamins, seven different minerals and 31 different types of herbs, herb mixtures or other supplements had been used by patients (Table 2). For patients using nutritional supplements, a mean of three supplements were used per patient (range 1 - 15). At the time of the interview, only 60 (58%) of these alternative therapies were still in use (Table 3). Interestingly, only 25% (4 of 16) of the non-FDA-approved drugs and 38% of the herbs that had been tried were still in use at the time of the survey, compared to the 81% and 82% current usage of vitamins and imagery, respectively.

The majority of patients believed that the use of these alternative therapies improved their general well-being and their HIV infection (Table 4). The average yearly cost of alternative treatment was $356 (range $0 - $10,400). Twenty-eight treatments were received without charge, 22 cost between $1 - $99; 38 between $100 - $499; 11 between $500 - $1,999; and four treatments cost $2,000 or more.

Table 1

Use of Alternative therapy among ACTU patients		
Type of Therapy	**Number of patients**	**Percent of patients**
Vitamins/minerals	36	45.6
herbal therapy	13	16.4
non-approved drugs*	11	13.9
imagery/meditation	11	13.9
massage therapy	6	7.6
spiritual healing	6	7.6
dietary regimens	6	7.6
hypnosis	2	2.5
acupuncture/acupressure	1	1.3
ozone therapy	1	1.3
bedwarmer	1	1.3
colon cleansing	1	1.3
crystal therapy	1	1.3
exercise regimen	1	1.3
peroxide (oral)	1	1.3

* Non-approved drugs include drugs not approved for use in the United States by the Food and Drug Aministration and also approved drugs used in unapproved dosages or without medical supervision. These included AL-721 (7 patients), compound Q (2), ribavirin (2), oral interferon (1), dextran sulfate (1), acyclovir (1), isoprinosine (1), parenteral interferon (1).

Of the patients who had tried at least one treatment, four spent no money, 11 spent from $1 - $99; 15 spent between $100 - $499; 13 spent from $500 - $1,999; and three spent $2,000 or more (maximum of $10,400). Although 18.4% of patients received treatments outside of Missouri, only two traveled specifically for that reason.

In most cases the primary care physician was unaware of the patient's use of alternative therapies, particularly the non-traditional approaches (Table 5). In almost two-thirds of cases, the primary care physician knew the patient was taking nutritional supplements or vitamins. In less than half the cases, however, was the primary care physician aware of the use of non-approved drugs. In only six cases was the therapy actually prescribed or administered by a licensed practitioner. These therapies used compound Q (two patients), "iscador" -- a mistletoe derivative, ozone, AL-721, and high dose acyclovir.

We found no difference in the rate of use of alternative therapies when patients were classified by diagnosis (asymptomatic, 55%, versus symptomatic, 57%) and by T-helper counts (less than 200 cells/mm^3, 47%; more than 200 cells/mm^3 63%). We also found no differences between the patients who used alternative therapy and those who did not in terms of race, age, educational background, and stage of HIV disease (data not shown).

Discussion

More than half the patients in this urban midwestern population had tried alternative therapy. The high rate of use of alternative therapies in HIV-infected patients suggests a dissatisfaction with the remedies provided by traditional medicine. Patients suffering from chronic illness, such as arthritis and cancer, have historically been the primary users of alternative therapies. Previous studies of HIV-negative populations have shown that patients who seek alternative care often have poorer relationships with traditional practitioners and are more likely to distrust the government and the medical establishment.[5,6] A distrust of the establishment may certainly also be a factor in patients with HIV disease.

The proportion of patients in our study who used alternative therapies (56%) is higher than in previous studies of HIV-positive patients - 36% of inpatients with AIDS in Chicago,[3] 38% of HIV-positive outpatients in London, England,[4] and 40% in a recent study in San Francisco.[7] This may reflect an increasing interest in and awareness of alternative therapies, although differences in demographics in the study populations, geographic or temporal trends, or the definition of alternative therapies could be also responsible for the variation.

We studied a population that was largely white, well-educated and male. The homogeneity of the group may be part of the reason we found no differences between patients who had and had not tried alternative treatment. Cassileth et al[5] found that cancer patients who used alternative therapies were more likely to be white and well-educated. It would be of interest to assess the use of alternative therapy in other populations - for example, indigent patients, or those attending AIDS support group meetings. In contrast to a recent study from San Francisco,[7] we did not find a difference in the use of alternative therapy that correlated with disease state. Patients with mild or early infection in our cohort were as likely to try alternative treatments as patients with AIDS.

The high proportion of patients (53%) who did not tell their doctors about the use of alternative therapies may represent mistrust in conventional practitioners. For the psychological or spiritual treatments, this is probably not important. However, diets, nutritional supplements, herbs and drugs have potential side effects[8] and the physician's knowledge of their use clearly would be relevant not only to the patients' general medical care but also to the conduct and interpretation of the clinical trials in which they are involved.

An interesting finding in this study is the high costs incurred by several patients. Three patients spent more than $2,000 ($2,700, $9,200, and $10,400). These included two patients who had traveled - to Miami and to San Francisco - to receive therapy. Many HIV-positive patients are finan-

Table 2

Vitamins, minerals and nutritional supplements used by HIV-positive patients

Vitamins / minerals		Nutritional supplements	
multivitamin	20	herb mixtures	8
megamultivitamin	3	lysine	7
vitamin C	21	beta-carotene	7
vitamin E	12	garlic tablets	5
B-complex	10	aloe juice	3
vitamin B12	10	Saint John's Wort	2
zinc	8	lecithin	2
iron	6	iscador (from mistletoe)	1
calcium	3	spirolina	1
vitamin A	2	salspanilla tea	1
vitamin B6	2	antler-8 (deer antler)	1
selenium	2	clove/spice vixture	1
potassium	1	green magna	1
vitamin D	1	revita	1
magnesium	1	PABA	1
folic acid	1	omega 3 fatty acids	1
pantothenic acid	1	multi-amino acid tabs	1
biotin	1	cod liver oil	1
germanium	1	primrose	1
		chlorophyll	1
		bee pollen	1
		lactaid	1
		ginseng root	1
		licorice root	1
		thymes	1

Table 3

Current (at time of interview) use of alternative therapy

Type of therapy	Number of patients currently using therapy
vitamins/minerals	29
imagery/meditation	9
herbal therapy	5
dietary regimens	4
spiritual healing	4
compound Q	2
oral interferon	1
acyclovir	1
bedwarmer	1
colon cleansing	1
ozone therapy	1

Table 4

Patients' assessment of effect of alternative therapy	
Effect on well being:	
Worsened	5.8%
No effect	22.3%
Improved	71.8%
Effect on HIV infection:	
Worsened	5.8%
No effect	35.9%
Improved	54.4%
Don't know	3.9%

Table 5

Awareness of the use of alternative therapy by primary care physicians

Type of therapy	Percent of doctors aware
massage therapy	17
spiritual healing	17
herbal therapy	31
imagery/meditation	45
non-FDA-approved drugs	47
vitamins/minerals	61
dietary regimens	67

cially strained because of their disease and their ability to pay may be a factor in the use of these therapies. Several patients mentioned that they had stopped using some treatments (vitamins, herbs, AL-721) because of the cost. Despite the cost, most patients felt their use of alternative therapy was beneficial, but readily admitted that the benefit was largely psychological. Many commented that they felt they had benefited simply because they had taken an active role in their own care, had reduced their stress levels, or had improved their baseline state of health, and these things alone would help slow the progression of the HIV infection. Since the psychological effect on physiologic processes is not well understood, this is not an unreasonable approach for patients to assume. However, the large number of different nutritional supplements, diets, and drugs they used appears to indicate that patients may employ some indiscretion in the use of these treatments.

In summary, we found that more than half of our patients had tried alternative therapies in some form. Although nutritional supplements and psychospiritual methods were the most commonly used, a substantial group of patients were taking substances that have potential risks. Most did not inform their doctors. Nevertheless, the medical profession ought to more vigorously assess the use of alternative therapies to more effectively advise their patients of the risks and benefits of these approaches, and thus protect some patients from expensive exploitation. Furthermore, the use of alternative therapies should be considered in assessing the efficacy and safety of drugs undergoing clinical trials in HIV-positive patients.

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Centrifugal Pump Support for Repair of Thoracic Aortic Injury

by Joseph T. Walls, M.D., Theresa Boley, R.N., MSN, Jack Curtis, M.D., Richard Schmaltz, M.D., and Weerachai Nawarawong, M.D.
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Spinal cord ischemia and the potential for paraplegia are always of concern during operations for repair of traumatic thoracic pseudoaneurysm. Patients who experience hypotension, loss of intercostal blood supply, or normothermic aortic cross clamp times greater than 30 minutes are more likely to become paraplegic.[1] The preservation of renal perfusion is also a concern.

A variety of techniques have been used to maintain distal aortic blood supply during cross-clamping of the thoracic aorta. A roller pump and systemic heparinization can maintain distal aortic perfusion with left atrial to femoral artery bypass or femoral artery to femoral vein bypass.[2] The usefulness of this technique, however, is limited because use of heparin is contraindicated for a patient who has multiple traumatic injuries accompanying the thoracic aorta pseudoaneurysm.

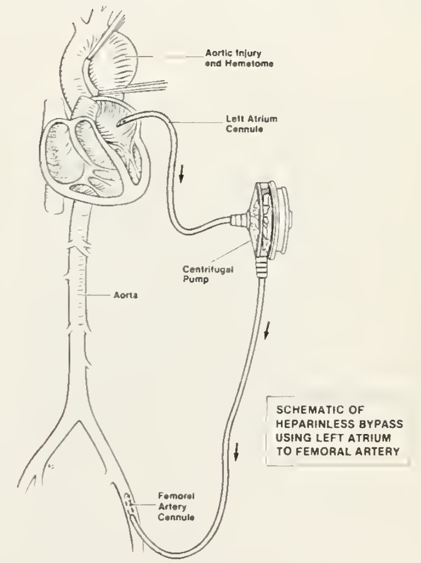
Femoral artery to femoral vein bypass with a roller pump, heparin bonded tubing, and no systemic heparinization has been performed successfully.[3] Systemic heparinization can also be avoided by using the patient's heart to generate blood flow through a heparin-bonded plastic bypass tube (Gott shunt).[4,5] The ascending aorta, aortic arch, and left ventricular apex have been used as proximal cannulation sites and the descending thoracic aorta or femoral artery have been used for distal cannulation.

The Bio-pump (BioMedicus, Inc., Minneapolis, MN) has been used without systemic heparinization during repair of traumatic thoracic aortic pseudoaneurysms.[6,7] The ascending aorta, aortic arch, and femoral artery have been used as cannulation sites with this technique. More recently, two case reports have documented the use of the Sarns centrifugal pump during surgical repair of thoracic aortic pseudoaneurysms.[8] This pump is similar to the Bio-Pump, but does not use rotator cones. Rather, centrifugal force propels blood through a low-profile, bladed impeller. The Sarns pump may offer the advantage of being less traumatic to blood elements as compared with the Bio-Pump. The lower surface area, lower prime volume, bladed impeller, and fewer revolutions necessary to generate equal flow and pressures are potential benefits of the Sarns pump.[9,10,11]

Methods

A uniform method of repair was used in four consecutive patients with traumatic pseudoaneurysm of the descending thoracic aorta. The aorta was repaired with a tightly woven dacron graft via a left posterolateral thoracotomy approach. The Sarns centrifugal pump was used to prevent spinal cord and visceral ischemia and to preserve renal function during cross clamping by perfusing the distal thoracic aorta without the use of systemic heparin. Cannulation was accom-

Figure 1


Aortic Injury and Hematoma
Left Atrium Cannula
Centrifugal Pump
Aorta
SCHEMATIC OF HEPARINLESS BYPASS USING LEFT ATRIUM TO FEMORAL ARTERY
Femoral Artery Cannula

The distal thoracic aorta is perfused by proximal cannulation of the left atrium and distal cannulation of the femoral artery. This setup with the use of the Sarns centrifugal pump allows well controlled afterload reduction, insures distal aortic perfusion and permits good visualization of the operative site. Used with permission J.T. Walls, et al. Sarns Centrifugal Pump for Repair of Thoracic Aortic Injury, Journal of Trauma, 29(9) 1283-1285, © by Williams and Wilkins, 1989.

Table 1

Traumatic Thoracic Pseudoaneurysm Repair with the Sarns Centrifugal Pump

Pt	Age (yrs)	ISS	Sarns Mean Flow L/M	Mean Proximal Pressure (mm Hg)	Mean Distal Pressure (mm Hg)	Cross Clamp Time (mins)	Complication	Hospital Mortality
1	37	38	0.7	60	65	26	None	No
2	17	24	1.5	51	50	29	None	No
3	61	30	1.7	38	50	32	Temporary recurrent nerve dysfunction	No
4	20	33	1.75	65	56	59	None	No

ISS=injury severity score, mm Hg=millimeters mercury, Yrs=years, mins=minutes, L/M=liters/minute

plished proximally through the left atrial appendage and distally through the left common femoral artery (Fig 1).

All four patients were men, between 17 and 61 years of age (median 29), who had been involved in motor vehicle accidents. Their injury severity scores ranged from 24 to 38 (median 31), with a median 4.5 systems involved.[12] These patients sustained various associated injuries, including lacerations (4 patients), fractures (3 patients), closed head injury (1 patient), carotid artery injury resulting in cerebrovascular accident (1 patient), cardiac contusion (2 patients), pulmonary contusion (2 patients), pneumothorax (2 patients), ruptured diaphragm (1 patient), abdominal evisceration (1 patient), hematuria (2 patients), and kidney contusion (1 patient).

In all four, the diagnosis of thoracic pseudoaneurysm was established by aortogram.

The time elapsed from injury to repair of the thoracic pseudoaneurysm ranged from 2 hours to 2 months, with a median of 4 hours. Proximal blood pressures were monitored by a right radial artery line. Proximal mean blood pressures were maintained in a range of 38 mmHg to 65 mmHg (mean 54 mmHg). Distal mean blood pressures were measured by a right femoral artery line and ranged from 50 mm Hg to 70 mmHg (mean 55mmHg). Mean centrifugal flow was maintained between 0.7 L/min and 1.75 L/min (mean 1.4 L/min) (Table 1).

Postoperative complications were limited to temporary recurrent nerve dysfunction in one patient, which resolved within six months. There were no disturbances in renal perfusion as reflected by renal function. The mean creatinine was 0.9 mg/dL preoperatively and 0.85 mg/dL postoperatively. Urine output ranged from 15 mL/hr to 360 mL/hr (median 76 mL/hr) during the first 24 hours postoperatively. There was no evidence of spinal cord injury. All patients demonstrated full range of motion of their extremities postoperatively.

Patients required 1 to 7 units packed red blood cells (median 3 units) during surgery. Postoperative bleeding was not a problem. The average hourly chest tube output ranged from 33.3 mL/hr to 55 mL/hr (median 49.8 mL/hr). Total chest tube output ranged from 800 mL to 1320 mL (median 1195 mL) in the first 24 hours. Platelet counts decreased in the first 24 hours postoperatively, ranging from 69,000 to 154,000 (median 112,500) but soon returned to preoperative levels without platelet transfusion.

The patients spent between 8 to 31 days in the hospital (median 22 days) and 4 to 23 days in the intensive care unit (median 6 days). All four patients survived hospitalization and are alive now, 3.6 months to 2.8 years (median 1.6 years) after their accidents. All have returned to work or their usual activities.

Discussion

Most patients who experience a traumatic thoracic aortic injury die immediately or within a short time after. More than 80% die at the scene of the accident.[13] Twenty percent live at least one hour, but by 24 hours after the accident, 40% of these survivors are dead, and by one week after the injury, 72% of the first survivors are dead.[14]

In addition to the aortic trauma, these patients commonly suffer multiple injuries. Blunt trauma to the chest, as often occurs in a car accident, may cause damage to the aorta and other organs as well. Particularly common are intra-abdominal injuries (occurring in approximately 50% of patients), rib fractures, pulmonary injury, and long-bone fractures. Lung contusion, left pleural effusion, and cardiac contusion occur frequently.[14] All four patients in our report suffered pulmonary injury, and two had cardiac contusion (2 patients).

Although aortic cross clamp time can usually be kept within 30 minutes, the ischemic time may have to be prolonged unexpectedly. For example, unsuspected arterial intimal injury requires repositioning of the aortic cross clamp, and other operative maneuvers may be needed. Patients with preoperative hypotension or shock and those who had a loss of intercostal arterial supply before or after operation may be at higher risk of spinal cord ischemia. The patients in our report had a median cross clamp time of 31 minutes and had no spinal cord injury.

Use of the Sarns centrifugal pump during cross clamping of the aorta appears to be beneficial and permits repair of the aorta without the use of heparin in patients who have injuries to several organs. The use of the pump allows a controlled temporary reduction in aortic blood pressure to prevent aortic clamp injury. The heart afterload may also be reduced by use of the pump, preventing excessive work by the heart during aortic cross clamping. This may be especially beneficial to patients with cardiac contusion or ischemic heart disease.

Blood is supplied to the distal aorta to preserve spinal cord and visceral perfusion. By regulating pump flow, the distal aortic flow and pressure can be augmented. Blood pressures, both proximal and distal to the aortic cross-clamp, must be carefully monitored and cerebral blood flow must be maintained. In one patient in this group the mean proximal arterial pressure dropped to 38 mmHg. While there were no untoward sequelae, it is important to use care with this technology to avoid depriving the brain of adequate circulation. Our practice has been to attempt to maintain three-fourths of the cardiac output to the brachiocephalic arterial supply.

Heparinless left atrial to femoral artery bypass using a centrifugal pump appears to offer a significant advantage in repair of traumatic thoracic aortic pseudoaneurysm. ■

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December

5 **Basic Mechanisms and Clinical Management of Allergic Airways Diseases** - Time: 7:45 a.m. to 4:45 p.m., Location: Wohl Auditorium, Washington University Medical Center, 4960 Audubon, St. Louis, Misouri. Contact: CME Washington University School of Medicine, 314/362-6893 or 800/325-9862.

6 **Flexible Sigmoidoscopy Seminar** - Time: 8:15 a.m.to 3:15 p.m., Location: Research Medical Center, 2316 East Meyer Boulvard, Kansas City, MO 64132. Contact: The Ed Bixby Institute for Postgraduate Medical Education, 800/892-5771, ext. 4306, or 800/821-5140, ext. 4306.

5-6 **The Heart 1991, 21st Annual Conference on Current Topics in Cardiology** Location Ritz-Carlton Hotel, Kansas City, MO. Presented by the Mid-America Heart Institute of Saint Luke's Hospital and Cardiovascular Consultants, Inc. Contact: Beth Paul CME Office, St. Luke's Hospital of Kansas City, Warnall Raod at 44th, Kansas City, MO. 64111. 816/932-2301

7 **New Perspectives in the Management of Myocardial Ischemia** — Location: Ritz-Carlton of Kansas City, Kansas City, MO. Contact: Monica Scheierman, University of Kansas Medical Center, Office of Continuing Education/SC100, Rainbow and Olathe Blvds., Kansas City, KS 66103. 913/588-4490.

9 **City-Wide Radiology Conference by Michael T. Modic, M.D., "Degenerative Disk Disease and Low Back Pain,"** —Location: Mallinckrodt Institute of Radiology, St. Louis, MO. Contact: R. Gilbert Jost, M.D., Chief of Diagnostic Radiology, Mallinkcrodt Institute of Radiology, 510 S. Kingshighway, St. Louis, MO 63110. 314/362-7130.

10-12 **Introduction to Doppler Echocardiography** — Location: St. Louis University Medical Center, St. Louis, MO. Contact: CME Office, St. Louis University Medical Center, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

12-15 **Cranio Facial Reconstruction** — Location: St. Louis Metropolitan Medical Society Building, St. Louis, MO. Contact: CME Office, St. Louis University Medical Center, 1402 S. Grand Blvd., St. Louis, MO 63104. 1-800-553-2712.

13 **Postgraduate Symposium on Infectious Diseases** — Location: Hyatt Regency Hotel, Kansas City, MO. Contact: Monica Scheierman, University of Kansas Medical Center, Office of Continuing Education/SC100, Rainbow and Olathe Blvds., Kansas City, KS 66103. 913/588-4490.

January 1992

7-8 **Transesophageal Echocardiography Course** - Location: Saint Louis University Medical Center. Contact : CME Office, St. Louis University Medical Center, 1402 S. Grand Blvd. St. Louis, MO 63104. 1\800\553-2712.

13 **Hypercholesterolemia In Women** - Time: 8:30 a.m., Location: Lutheran Medical Center - First Floor Conference Room OB/GYN Departmental Meeting, 2639 Miami Street, St. Louis, MO 63118.

13 **City-Wide Radiology Conference** — Location: St. Louis University, St. Louis, MO. Contact: R. Gilbert Jost, M.D., Chief of Diagnostic Radiology, Mallinckrodt Institute of Radiology, 510 S. Kingshighway, St. Louis, MO 63110. 314/362-7130.

16-18 American Academy of Pain Medicine's 1992 Annual Conference – Location: Registry Hotel, Scottsdale, AZ. Contact: Carol Endicott, American Academy of Pain Medicine, 5700 Old Orchard Rd., First Floor, Skokie, IL 60077-1024. 708/966-9510.

20-24 **The Medicolegal Death Investigator Training Course** - Location: Margaret McCormick Doisy Learning Resources Center, Contact: CME Office St. Louis Universitry Medical Center, 1412 S. Grand Blvd., St. Louis, MO 63104. 314/577-8167.

29 **Updates In Surgery,** The Fourth Annual Joseph E. Flynn Lecture Series - Time: 8 a.m. to 12:30 p.m., Location: von Gontard Conference Center, St. John's Mercy Medical Center, 615 South New Ballas Road, St. Louis, MO 63141. Contact: Judith L. O'Guin at 314/569-6290.

February

3-6 **Practical Anatomy & Surgical Technique Workshop Temporal Bone Surgical Dissection.** Hands -on workshop - Location: St. Louis Metropolitan Medical Society Building. contact CME Office, St. Louis University Medical Center, 1412 S. Grand Blvd, St. Louis, MO 63104. 314/577-8167.

7-8 **Midwinter Laser Course & Fluorescein Angiography Workshop** – Location: Hyatt Regency Hotel, St. Louis, MO. Contact: Leigh Dundon, Suite 17413 - East Pavilion, One Barnes Hospital Plaza, St. Louis, MO 63110. 314/367-1181

10 **6th Annual Daniel R. Biello Memorial Lecture by Robert O. Bonow, M.D., "Evaluation of Myocardial Viability,"** – Location: Mallinckrodt Institute of Radiology, St. Louis, MO. Contact: R. Gilbert Jost, M.D., Chief of Diagnostic Radiology, Mallinckrodt Institute of Radiology, 510 S. Kingshighway, St. Louis, MO 63110. 314/362-7130.

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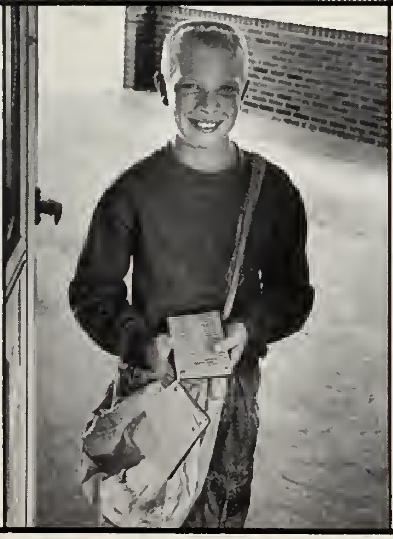

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In Memoriam

■ **Wilfred W. "Bill" Hurst, M.D.**, died September 10, 1991 at the age of 87. Dr. Hurst, an orthopedic surgeon, practiced medicine in Jasper County for more than 40 years. He moved to Joplin in 1938 and, after service with the U.S. Navy in the Pacific Theater of War during World War II, he was Jasper County coroner from 1948-60, chief of staff for both Freeman Hospital and what is now St. John's Regional Medical Center. He retired from his private practice in 1985 but he continued as medical director of the Joplin Health Department and Joplin House Nursing Home until 1988. Dr. Hurst received his medical degree from the Northwestern University Medical School at Chicago. He was a member of the Jasper County Medical Society.

■ **Mary Ann Butler, M.D.**, died September 2, 1991 at the age of 30 in Hannibal. Dr. Butler, an anesthesiologist, practiced medicine in Kansas City for one year in Kansas City before moving to Hannibal in 1990 with her husband Dr. Steven Butler, a surgeon at the Hannibal Clinic. Dr. Butler received her bachelor of arts in biology and doctor of medicine degrees from the University of Missouri - Kansas City in 1985. She was a member of the Northeast Missouri County Medical Society.

■ **Carlos G. Santoro, M.D.**, died August 20, 1991 at the age of 65 in Kansas City, Kansas. Dr. Santoro, a general surgeon, practiced privately in Kansas City for 30 years. He was a staff member at Baptist Medical Center and a former member of the medical staffs of Trinity Lutheran and St. Mary's hospitals. He was a member of the Jackson County Medical Society. Dr. Santoro received his medical degree at Tulane University in 1952 and served in the Army Medical Corps from 1952 to 1955.

■ **Robert Ferguson, M.D.**, died August 28, 1991 in Joplin. He was 79. Dr. Ferguson was a general practice physician. The son of a missionary, he grew up in China and the Philippine Islands before graduating from the Indiana University Medical School in 1938. During the World War II years he worked for the Indiana State Board of Health, joined the Army, and served with the U.S. Public Health Department. After 1945, he practiced medicine in Webb City where he lived until 1979 and in Joplin until he retired in 1991. He was director of Freeman Hospital Emergency Room for 16 years and a member of the Jasper County Medical Society.

■ **Merriam Gearhart, M.D.**, died July 17, 1991 in Bethany. He was 78. Active in family practice, Dr. Gearhart completed a graduate program in surgery at the University of Pennsylvania after he received his medical degree from the University of Iowa in 1937. He was a Fellow of the Academy of Family Practice and a Diplomate of the International Academy of Proctology. He served in Europe during WWII and began medical practice in Bethany in 1946. Dr. Gearhart was active in the Preceptor program of the University of Missouri-Columbia and Kansas City and he was a charter member of the Grand River Medical Society.

Medical School News

UNIVERSITY OF MISSOURI - COLUMBIA

Several faculty and alumni recently were honored by the MU Alumni Association. **Russell Shelden**, M.D., who graduated from the school's two-year program in 1947, won the association's highest honor, the Distinguished Service Award. A retired anesthesiologist, he made monthly visits to Columbia for 25 years to teach medical students. Winners of Faculty-Alumni Awards were:

H. Peter Ekern, M.D. '59, a Mexico, Mo. physician who has served as a preceptor for medical students for 27 years;

Edith Mitchell, M.D., associate professor of hematology and oncology;

Douglas Randall, Ph.D., professor of biochemistry;

Wynn Volkert, Ph.D., professor of radiology, biochemistry and nuclear engineering and an associate career research scientist at Harry S. Truman Memorial Veterans' Hospital.

William C. Allen, M.D., professor and chief of orthopedic surgery, has been elected president of the Mid-American Orthopaedic Association and was named program chairman for the American Orthopaedic Association's annual meeting.

An endowed professorship has been established to honor **Philip C. Anderson**, M.D., professor and director of dermatology who has been on the MU faculty for 26 years.

Funds for the professorship were given by friends and former resident physicians. **Gary Dyer**, M.D., and **Victoria Gunn**, M.D., both former MU students and dermatology residents, organized the drive. Anderson will hold the professorship, the first person in the school's history to hold an endowed professorship in his own name.

Ray Cope, M.D., associate professor of radiology, recently gave six lectures on various skeletal radiologic topics in Great Britain. They included presentations at the Universities of Bristol, Nottingham and Liverpool as well as three regional hospital centers.

Bernard Ewigman, M.D., associate professor of family and community medicine, was appointed to the Health Care Technology Study Section of the Agency for Health Care Policy and Research. The group of 20 appointed members reviews grant applications and assesses research needs.

Michael Misfeldt, Ph.D., associate professor of molecular microbiology and immunology, received the school's first Jane Hickman Teacher of the Year Award. He was honored Oct. 18 during the 34th annual Physicians Alumni Weekend. Misfeldt came to MU in 1981 after serving a postdoctoral fellowship at the National Institutes of Health Laboratory of Molecular Genetics. He directs the immunology portion of the Medical Microbiology course.

Hugh E. Stephenson, Jr., M.D., Growdon Distinguished Professor of Surgery, has been re-elected to the American Medical Association Council on Medical Education.

ST. LOUIS UNIVERSITY

Camilo R. Gomez, M.D., assistant professor of neurology and director of the Souers Stroke Institute, is involved in a nationwide, five-year research project to evaluate a new way of reducing the damaging effects of stroke. The study evaluates the effectiveness of a specific heparinold in patients with an early diagnosis of stroke. The heparinolds have been developed in order to match the potential effects of heparin while limiting the risks.

Robert B. Belshe, M.D., professor of internal medicine and director of the division of infectious diseases and the Center for Vaccine Development, is testing a new nose drop vaccine in infants to prevent influenza. The vaccine contains live but weakened virus that has been genetically altered and which stimulates an immune response without causing illness. There has not been a major flu outbreak for several years and several hundred young children who have not had an opportunity to develop any immunity to the Influenza-A strain have received the new nose drop vaccine.

Bernard R. Chaltman, M.D., professor of internal medicine and director of the division of cardiology, is participating in the TIMI 5 Open Label study. The study is designed to determine whether the drug, r-hirudin, is more effective than Heparin, another anticoagulant, in thinning the blood and preventing blood clots from forming in the arteries. Patients with acute myocardial infarction who are diagnosed within six hours of symptom onset will be eligible for this new form of therapy.

Mark G. Barnett,M.D., has been named assistant professor of surgery, division of cardiothoracic surgery. His specialty is surgery of the aorta. Dr. Barnett graduated in 1983 from the University of Iowa College of Medicine in Iowa City. He completed his residency in general surgery at the University of Wisconsin in Madison and he completed his residency in cardiothoracic surgery at the Medical College of Virginia in Richmond.

WASHINGTON UNIVERSITY

Philip E. Cryer, M.D., director of the division of endocrinology, diabetes and metabolism, has been named editor of the leading diabetes research publication *Diabetes* beginning January 1992.

Six other faculty members will serve as associate editors of the journal. They are **David D. Chaplin**, M.D., Ph.D., associate professor of medicine and assistant professor of genetics and molecular microbiology; **Michael L. McDaniel**, Ph.D., associate professor of pathology; **Mike M. Mueckler**, M.D., professor of medicine; **Julio V. Santiago**, M.D., professor of pediatrics and associate professor of medicine; and **Joseph R. Williamson**, M.D., professor of pathology.

Stephen J. Giddings, M.D., Ph.D., associate professor of medicine; **Lee Ratner**, M.D., Ph.D., associate professor of medicine and assistant professor of molecular microbiology; and **Stanley J. Korsmeyer**, M.D., professor of medicine and associate professor of molecular microbiology, have been asked to serve on separate study sections in the Division of Research Grants for the National Institutes of Health.

Study sections review grant applications submitted to the NIH, make recommendations on the applications to the appropriate NIH national advisory council or board, and survey the status of research in their fields of science.

Dr. Giddings researches the regulation of insulin gen expression and will serve on the Physiological Sciences Study Section. Dr. Ratner is researching the origin and development of human retrovirus infections and will serve on the AIDS and Related Research 3 Study Section. Dr. Korsmeyer, who will serve on the Pathology B Study Section, studies chromosomal translocation that lead to various forms of leukemia and lymphoma.

J. Ragan Thomas, M.D., has been elected president-elect of the American Academy of Facial Plastic and Reconstructive Surgery. Dr. Thomas maintains a practice at the Facial Plastic Surgery Center in St. Louis and is an assistant clinical professor of Otolaryngology.

OTHER NEWS

Robert Saylor, M.D., Springfield, has been named to the board of directors of the Mid-America Transplant Association (MTA). Dr. Saylor is a nephrologist. MTA is a private, not-for-profit corporation based in St. Louis and is designated by the federal government to coordinate vital organ procurement in Missouri, southern Illinois, and northeastern Arkansas.

Murray Boles, M.D., Columbia, has been named as a fellow of the American College of Radiology during the group's annual meeting that was held September 27 - October 3 in Minneapolis, MN. Dr. Boles is one of 129 new fellows named by the College's Board of Chancellors.

George Bohigian, M.D., St. Louis, presented a course on The Management of Endophthalmitis: Diagnostic and Therapeutic Guidelines Including the Use of Vitrectomy in October at the annual American Academy of Ophthalmology meeting in Anaheim, California.

Cafeteria Workers Instigate Food Fight

"They were armed to the teeth," one surprised customer said. "You should have seen it. Carrots, tomatoes, broccoli everywhere." It seems cafeteria workers all over town have joined **The Great American Food Fight Against Cancer**. Now they're recommending foods that may help reduce cancer risk. The list includes foods high in vitamins A and C, high in fiber and low in fat.

"I love to see people eat healthy," as one server put it. "When I throw a big helping of steamed vegetables on someone's plate, I feel real good inside."

Similar sentiments were echoed by other workers. "When a kid reaches for low-fat milk or yogurt, or grabs an apple for dessert, well, it's just beautiful," said one emotional server.

Experts recommend that people join The Great American Food Fight Against Cancer whether dining out or at home.

The American Cancer Society, sponsor of the Food Fight, has more information. Call **1-800-ACS-2345**.

And, be on the lookout for Community Crusade volunteers armed with shopping lists. Ready? Aim. Chew!

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Resident Section News

MINUTES OF THE MSMA-RPS GOVERNING COUNCIL UNIVERSITY HOSPITAL AND CLINICS COLUMBIA, MISSOURI

October 6, 1991

Members Present: C. Chris Pittman, M.D.; Steve Olson, M.D.; Mark Brinkman, M.D.; Maria L. Evans, M.D. and Karen Zanol, M.D..

The meeting was called to order at 11:20 a.m. by Dr. Pittman. The minutes were read and approved. The treasurer's report is pending and will be announced at the next meeting.

Committee Reports

Membership Committee: Dr. Pittman reported that the RPS has made contact with the society executives of the St. Louis Metro, Kansas City Metro, and Boone County medical societies for the purposes of membership recruitment. Active resident recruitment is presently underway in those three societies. Dr. Pittman also mentioned the need for a resident contact person in the Springfield area at the Cox Medical Center family practice residency program. Interested persons may contact him at any time.

Publications Committee: Dr. Evans reported that the resident news page is now a regular feature in *Missouri Medicine.* She would appreciate copies of minutes, newsletters, features, etc. from the various housestaff organizations throughout the state, so as to make a resident news page a forum for all Missouri resident physicians.

Councilor Report

Dr. Zanol reported that at the last MSMA Council meeting, the Council voted to sizably increase MSMA funding for the resident section. Many council members voiced that they are willing to invest in the future of Missouri resident physicians and have agreed to provide additional funding to increase resident participation at meetings. Dr. Zanol expressed her thanks to the MSMA council for their generosity.

Old Business

Dr. Pittman stated that the Governing council directory was recently disseminated, so the Council members should have both home and work phone numbers of its members.

Dr. Pittman also mentioned that the Governing Council needs to prepare a budget for the next year. Members are asked to keep accurate records of Council-related expenses so that we can prepare a realistic, accurate budget.

New Business

The MSMA constitution needs revision. Some of the clauses are no longer applicable, and may conflict with AMA policy. Dr. Pittman will appoint a committee to study the revision before it is presented at the spring MSMA-RPS meeting.

Resolutions are needed for the spring MSMA-RPS meeting! All residents throughout the state are encouraged to submit resolutions. At last year's meeting, several resolutions introduced by RPS were presented and accepted by the MSMA House of Delegates.

The meeting was adjourned at 12:20 p.m.

Maria L. Evans, M.D.
for Robert Swanson, M.D., Secretary

RPS HOUSE STAFF NEWS

University of Missouri - Columbia

At the October meeting of the University Hospital and Clinics House Staff Organization, president Caroline Kerber was pleased to announce that residents now sit on four of the major hospital committees: Materials and Standards, Ethics, Clinical Cancer, and the Quality Assurance.

Other projects by the UHC-HSO include a Paperwork Task Force to eliminate unnecessary paperwork, redundant forms, etc., and to aid hospital officials in formulating solutions to the problem of excess paperwork.

Plans are underway for the creation of a house staff newsletter, including a "name our newsletter" contest with a $50 first prize for the winning title.

Note: We'd like to include your program's house staff news in future RPS News Pages! Please send your program's House Staff Organization minutes or house staff happenings to:

Maria L. Evans, M.D.
M263 Department of Pathology
University of Missouri Hospital and Clinics
Columbia, Missouri 65212

RPS NOTES

Being wondering what your AMA Resident Physicians Section has been doing for you? Here is a summary of actions by the AMA-RPS assembly over the past six months that were adopted by the AMA House of Delegates:

HIV

The AMA is presently evaluating the effectiveness of "stick-proof" needles and other technologies for preventing occupational transmission of HIV and the fiscal impact of such technologies.

PATERNITY LEAVE

The AMA House of Delegates recently endorsed the concept of paternity leave following birth or adoption as a benefit for residents.

PRACTICE PARAMETERS

The AMA is urging national medical specialty societies to work with residents within their specialties to develop practice parameters.

Although the AMA House of Delegates is the body that ultimately votes upon these actions, it's important to remember that these ideas were initiated by **RESIDENTS** throughout the country - - residents very much like yourselves. You or your housestaff organizations can make your ideas or concerns know to organized medicine by writing a resolution for next April's MSMA annual meeting. Contact Tom Holloway at MSMA at 800/869-MSMA for details.

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AGE AND INNOVATIONS MAY SOON INFLUENCE END-OF-LIFE DECISIONS

Recent advances in medical technology and a rapidly aging population have changed many of the circumstances surrounding the end of life and the decisions that must be made regarding the elderly and the terminally ill. Recent changes in Missouri law allow individuals to direct physicians regarding their personal wishes regarding the end of life, "living wills", and designating another individual to have "durable power of attorney." Making these decisions in advance can save already-distraught families a great deal of anguish.

Types of End-Of-Life Decisions

Most of us have said at one time or another, "If the only thing keeping me alive is a machine, I don't want it." Unfortunately, the issue of "brain death" is only one of the common end-of-life decisions encountered in the hospital setting.

Most of us have never considered or discussed with our loved ones the other types of decisions involved. This causes families great difficulty in deciding these issues, because their loved one has never expressed an opinion regarding the other issues at hand.

Sadly, most families deal with these issues by not making a decision, which often leads to distress and guilt by family members, frustration among the medical care team, and misunderstanding and miscommunication between the family and the health care team. Families often feel "left out" of the decision-making process and vent that frustration at the "uncaring", "unfeeling" medical team.

These stressful situations could have been averted if the dying person had vocalized his or her wishes before catastrophe occurred. Below are some of the common decision which must be made in an end-of-life situation:

CODE STATUS

This refers to the criteria for restarting the heart when it stops. This therapy has saved countless lives, when appropriately initiated, but may be inappropriate in some situations.

For instance, if a 31 year-old healthy person's heart stops in the middle of hernia repair surgery, a "code" is certainly appropriate, and would be the expected response to such a situation. However, cardiac resuscitation in a 77 year-old person dying of terminal cancer is probably not appropriate. Unfortunately, unless physicians are instructed by the patient that he or she does not wish a "code" in this situation, they may be obligated to initiate resuscitation measures anyway because of medicolegal considerations.

BREATHING TUBES AND RESPIRATORS

This therapy has benefited millions of individuals who needed assistance in breathing while recovering from serious illness. Even in elderly, debilitated, terminally ill individuals, artificial respiration can "buy extra time" in overcoming acute illnesses such as pneumonia.

Often, terminal cancer patients may have a bout with pneumonia early on, recover, and live another year or two of what would be considered a "quality" life. However, once again, unless a directive is given to the contrary, physicians may be obligated to place a breathing tube in a patient or use artificial ventilation when there is no hope of recovery. Similar issues can also revolve around other chronic therapies such as kidney dialysis.

BRAIN DEATH

Criteria vary from state to state about when the brain is determined to be non-functioning. "Living wills" written in other states could be null and void if a person sustained mortal injuries from an auto accident in another state.

ARTIFICIAL NUTRITION

As the recent Nancy Cruzan case illustrated, decisions regarding feeding tubes and artificial nutrition can be very difficult. In addition to the action of actually withholding food and water is the problem of what to do if a feeding tube becomes dislodged. Families may have to decide whether to have the tube re-inserted or not.

Planning End-Of-Life Decisions

Physicians, lawyers, ethics experts, and the clergy all agree after many years of grappling with this complex issue that despite differing individual religious beliefs, healthcare beliefs, and personal preferences that medical therapies need not be initiated or that they may be discontinued if the patient will not benefit from them.

They also agree that people should be empowered to make these decisions for themselves.

—First, talk about these issues with your family or close friends and make your wishes known. If you need assistance, your physician, your lawyer, and your minister can provide input.

—A recent Missouri law allows individuals to direct the withholding of life-prolonging procedures through a declaration of a "living will". A sample form appears in the statute, but an individual can write his or her own. This declaration does not authorize euthanasia ("mercy killing") or any willful act or omission to shorten life.

—In addition, this declaration can be revoked at any time without regard to a patient's mental or physical condition. The physician is required by law to honor your declaration, or its revocation.

—A physician or facility unwilling or unable to comply with your request must take all reasonable steps to have you transferred to another physician or facility.

—Finally, Missouri law allows individuals to appoint another individual to have what is called "durable power of attorney." This document allows you to designate a person to be the spokesperson for your health care decisions should you become incapacitated, as well as manage your financial affairs. Contact your family attorney if you wish to designate such a person.

By making your end-of-life decisions now, without the stress of the hospital setting, you can save your family from difficult decisions and ensure that your wishes are carried out to the letter.

This health information feature is provided to you as a public service from your physician and the member physicians of the Missouri State Medical Association

New Members

Kwan-Ho "Casey" Chan, M.D., 2700 McClelland Blvd., Joplin 64804, has become a member of the Jasper County Medical Society. Dr. Chan received baccalaureate and masters degrees from the University of Toronto and obtained his medical degree from the University of Toronto in 1978. He completed his residency at the University of Toronto Hospital. Dr. Chan specializes in orthopedic surgery.

Robert W. Cooper, M.D., East Highway 54, Camdenton 65020, has become a member of the Lake of the Ozarks Medical Society. Dr. Cooper received his baccalaureate degree from the University of Kentucky and obtained his medical degree from the University of Kentucky College of Medicine in 1975. He completed his residency at the University of Louisville Affiliated Hospitals, Louisville, Kentucky. Dr. Cooper specializes in General Practice.

Thomas E. Cox, M.D., 1331 Ashland Hills Drive, Cape Girardeau 63701, has become a member of the Cape Girardeau County Medical Society. Dr. Cox received his baccalaureate degree from John Hopkins University and his medical degree from the University of Virginia in 1985. He completed his residency at the Oregon Health Sciences University, Portland, OR. Dr. Cox specializes in anesthesiology.

Michael E. Critchlow, M.D., 201 West Broadway, Columbia 65203, has become a member of the Boone County Medical Society. Dr. Critchlow received his baccalaureate degree from Southeast Missouri State University and his medical degree from Vanderbilt School of Medicine in 1974. He completed his residency at the Medical College of Ohio, Toledo, Ohio. Dr. Critchlow specializes in internal medicine.

Jeffrey P. Frey, M.D., 1000 W. Nifong Blvd., Building 2, Suite 200, Columbia 65203, has become a member of the Boone County Medical Society. Dr. Frey received his baccalaureate degree from Cornell University and his medical degree from the SUNY College of Medicine at Syracuse, New York in 1974. He completed his residency at the SUNY - Health Science Center, Syracuse. Dr. Frey specializes in internal medicine.

Jerome F. Greenfield, M.D., 1101 East Southwest Blvd., Jefferson City 65109, has become a member of the Cole County Medical Society. Dr. Greenfield received his baccalaureate degree from Drake University and his medical degree from the University of Iowa in 1985. He completed his residency at the University of Kansas Medical Center, Kansas City, Ks. in 1989. Dr. Greenfield specializes in psychiatry.

Howard L. Houghton, M.D., 6400 Prospect, Suite 114, Kansas City 64132, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. Houghton received his baccalaureate degree from Kansas State University and his medical degree from the University of Kansas School of Medicine. He completed his residency at the University of Kansas Medical Center in 1989. Dr. Houghton specializes in psychiatry.

George P. Hubbell, M.D., Medical Office Building, Room 107, Lake of the Ozarks Hospital, Osage Beach 65065, has become a member of the Lake of the Ozarks Medical Society. Dr. Hubbell received his baccalaureate degree from Westminster College and Masters degree from the University of Missouri-Columbia. He obtained his medical degree from the University of Missouri-Columbia in 1987 and completed his residency at the University of Michigan, Ann Arbor. Dr. Hubbell specializes in obstetrics/gynecology.

Joel T. Jeffries, M.D., 400 Keene St., P.O. Box O, Columbia 65201, has become a member of the Boone County Medical Society. Dr. Jeffries received his baccalaureate degree from the University of Texas at Austin and his medical degree from Texas A&M College of Medicine, College Station, Texas in 1984. He completed his residency at the University of Missouri-Columbia. Dr. Jefferies specializes in orthopedic surgery.

Lenworth N. Johnson, M.D., 5401 W. Tayside Circle, Columbia 65203, has become a member of the Boone County Medical Society. Dr. Johnson received his baccalaureate degree from the Rensselaer Polytechnic Institute and his medical degree from the Albany Medical College, Albany, N.Y., in 1980. He completed his residency at the Jules Stein Eye Institute, UCLA, Los Angeles, California. Dr. Johnson specializes in ophthalmology.

Rosa Anne Kincaid, M.D., 919 Kingsway Mall, Sikeston 63801, has become a member of the Southeast Missouri Medical Society. Dr. Kincaid received her baccalaureate degree from the City College of New York and her medical degree from Temple University School of Medicine, Philadelphia, PA in 1984. She completed her residency at the Glendale Adventist Medical Center, Glendale, CA.

Dr. Kincaid specializes in family practice.

Kendel L. Klein, M.D., I-44 Business Loop, Mt. Vernon 65712, has become a member of the Lake of the Ozarks Medical Society. Dr. Klein received his baccalaureate degree from Wichita State University and his medical degree from the University of Kansas School of Medicine in 1982. He completed his residency at St. Francis Family Practice Center, Wichita, KS. Dr. Klein specializes in family practice.

Douglas P. Koehn, M.D., 913 Redwing Drive, Marshall 65340, has become a member of the Saline County Medical Society. Dr. Koehn received his medical degree from the University of South Dakota, Sioux Falls, SD in 1985. He completed his residency at the University of Illinois College of Medicine, Rockford, IL. Dr. Koehn specializes in family practice.

Matthew T. Lewis, M.D., 1820 Southwest Blvd., Jefferson City 65109, has become a member of the Cole County Medical Society. Dr. Lewis received his undergraduate degree from Washington University and his medical degree from the University of Missouri-Columbia School of Medicine in 1987. He completed his residency at the Medical College of Wisconsin, Milwaukee, WI. Dr. Lewis specializes in ophthalmology.

S. Jay Lensgraf, M.D., 1704 S. Ingram, Sedalia 65301, has become a member of the Pettis County Medical Society. Dr. Lensgraf received his baccalaureate degree from the University of Oklahoma and his medical degree from the University of Oklahoma, Oklahoma City, OK in 1985. He completed his residency at the University of Oklahoma. Dr. Lensgraf specializes in psychiatry.

John P. Miller, M.D., 2210 Shannon Court, Jackson 63755, has become a member of the Cape Girardeau County Medical Society. Dr. Miller received his undergraduate degree from the University of Kentucky and his medical degree from the University of Louisville in 1986. He completed his residency at the University of Kentucky Medical Center, Lexington, KY. Dr. Miller specializes in radiation oncology.

Edith P. Mitchell, M.D., 1 Hospital Drive, Columbia 65212, has become a member of the Boone County Medical Society. Dr. Mitchell received her baccalaureate degree from Tennessee State University and her medical degree from the Virginia Commonwealth University, Medical College of Virginia School of Medicine, Richmond, VA in 1974. She completed her residency at the Hubbard Hospital - Meharry Medical College, Nashville, TN. Dr. Mitchell specializes in oncology.

William N. Rosenthal, M.D., 1000 East 50th Street, #110, Kansas City 64110, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. Rosenthal received his undergraduate degree from the University of Missouri-Kansas City and his medical degree from the University of Missouri-Kansas City in 1982. He completed his residency at Tulane University, New Orleans. Dr. Rosenthal specializes in ophthalmology.

J. Christopher Rowland, M.D., 6400 Prospect, Suite 112, Kansas City 64132, has become a member of the Metropolitan Medical Society of Greater Kansas City. Dr. Rowland received his baccalaureate degree from Kansas University and his medical degree from Kansas University in 1979. He completed his residency at the University of Kansas Medical Center. Dr. Rowland specializes in pediatrics.

Lawrence R. Schacht, M.D., 7934 N. Lindbergh, Hazelwood 63042, has become a member of the Missouri State Medical Association. Dr. Schacht received his undergraduate degree from the University of Wyoming and his medical degree from the Oregon Health Sciences University, Portland, OR in 1975. He completed his residency at the David Grant Medical Center, Travis Air Force Base, California. Dr. Schacht specializes in pulmonary disease.

Dana B. Schoenleber, M.D., 3800 S. National, Springfield 65807, has become a member of the Greene County Medical Society. Dr. Schoenleber received his baccalaureate degree from Kansas State University and his medical degree from the University of Kansas School of Medicine in 1980. He completed his residency at the Eastern Virginia Medical School in Norfolk. Dr. Schoenleber specializes in ophthalmology.

Horace L. Schneider, D.O., 2147 Belleridge Pike, Cape Girardeau 63701, has become a member of the Cape Girardeau County Medical Society. Dr. Schneider received his undergraduate degree from the University of Missouri - Kansas City and his medical degree from the Kirksville College of Osteopathic Medicine in 1979. He completed his residency at the Chicago Osteopathic Medical Center and the Doctors Hospital in Columbus, Ohio. Dr. Schneider specializes in gastroenterology.

Gerard R. Schroeder, M.D., Building 29, 659 East Spring Street, Cape Girardeau 632701, has become a member of the Cape Girardeau County Medical Society. Dr. Schroeder received his baccalaureate degree from SUNY - Albany and his medical degree from SUNY - Stony Brook in 1986. He completed his residency at University Hospital, Stony Brook, New York. Dr. Schroeder specializes in anesthesiology.

Neil R. Schwartzman, M.D., 725 S. Monroe, Lebanon 65536, has become a member of the Laclede County Medical Society. Dr. Schwartzman received his undergraduate degree from Johns Hopkins University and his medical degree from Auto De Guadalajara, Fac De Med, Guadalajara, Mexico in 1986. He completed his residency at the Maimonides Medical Center in Brooklyn, New York. Dr. Schwartzman specializes in internal medicine.

Jeffery S. Steele, M.D., 2709 Plymouth, Cape Girardeau 63701, has become a member of the Cape Girardeau County Medical Society. Dr. Steele received his baccalaureate degree from the University of Missouri - Kansas City and his medical degree from the University of Missouri - Kansas City in 1984. He completed his residency at the National Naval Medical Center, Bethesda, Maryland. Dr. Steele specializes in anesthesiology.

Thomas M. Vasely,M.D., 510 South Kingshighway, St. Louis 63108, has become a member of the Missouri State Medical Association. Dr. Vasely received his undergraduate degrees from the University of Minnesota and his medical degree from the Mayo Medical School, Rochester, MN in 1986. He completed his residency at the Mayo Graduate School of Medicine. Dr. Vasely specializes in diagnostic radiology.

Timothy E. Vierling, M.D., 1513 Union, Suite 2200, Moberly 65270, has become a member of the C-M-M-R Medical Society. Dr. Vierling received his baccalaureate degree from Washington University and his medical degree from St. Louis University in 1987. He completed his residency at Rush Presbyterian St. Lukes, Chicago, IL. Dr. Vierling specializes in obstetrics/gynecology.

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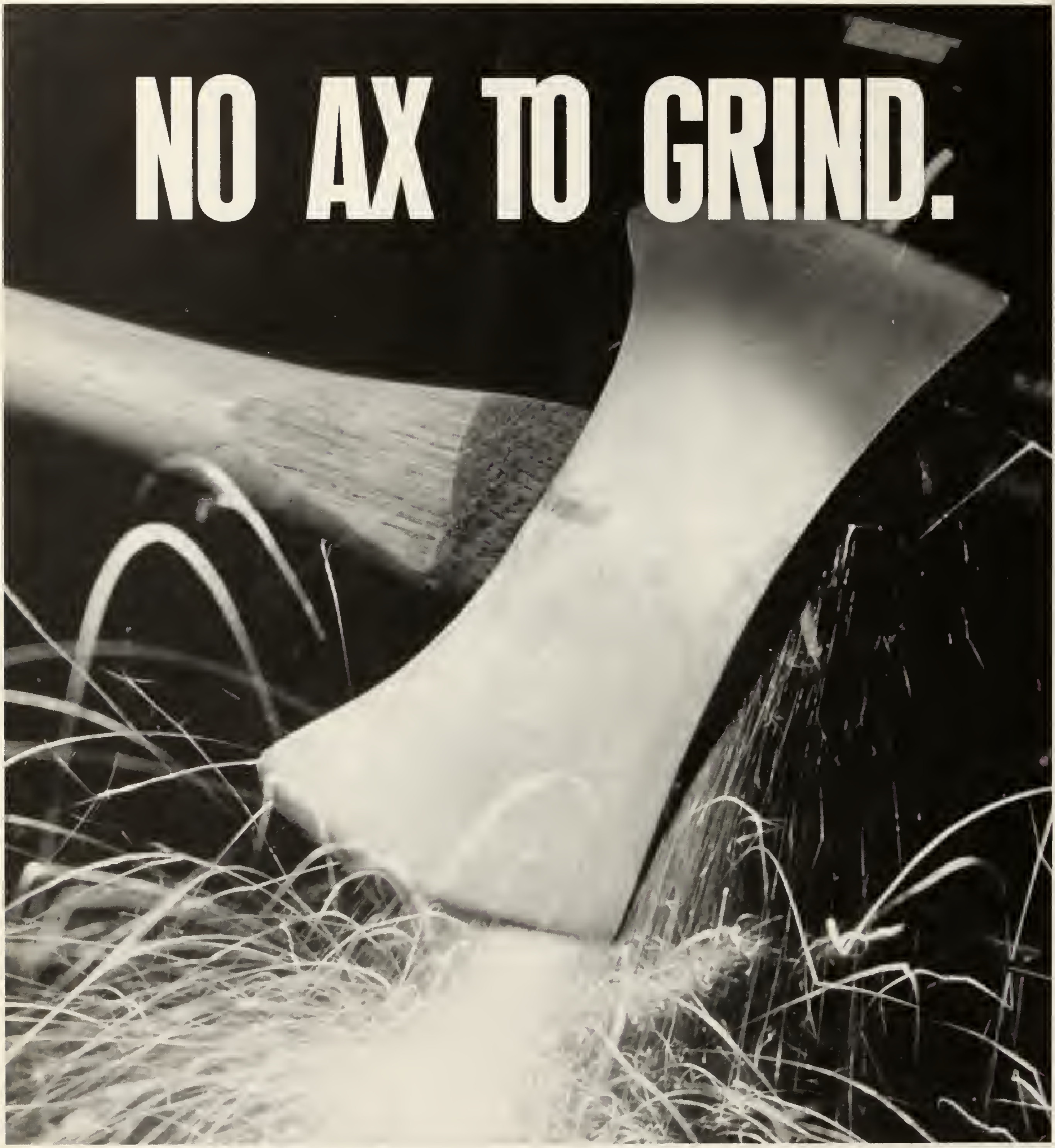

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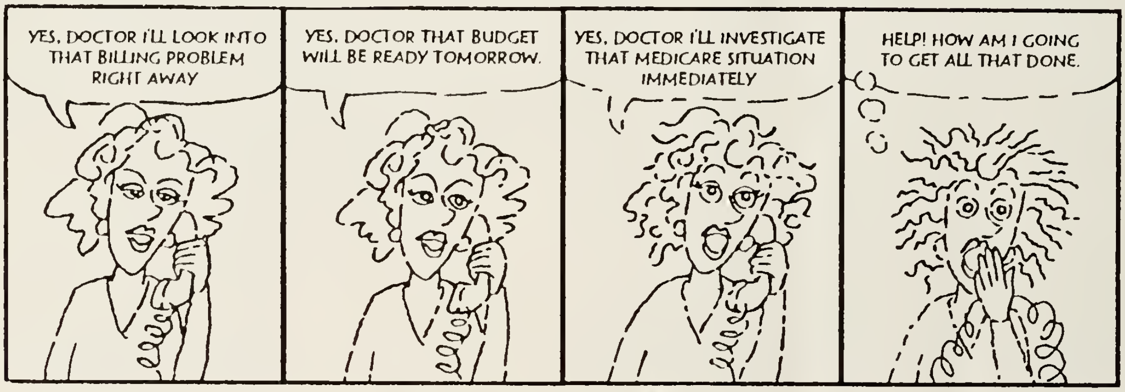
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References:
1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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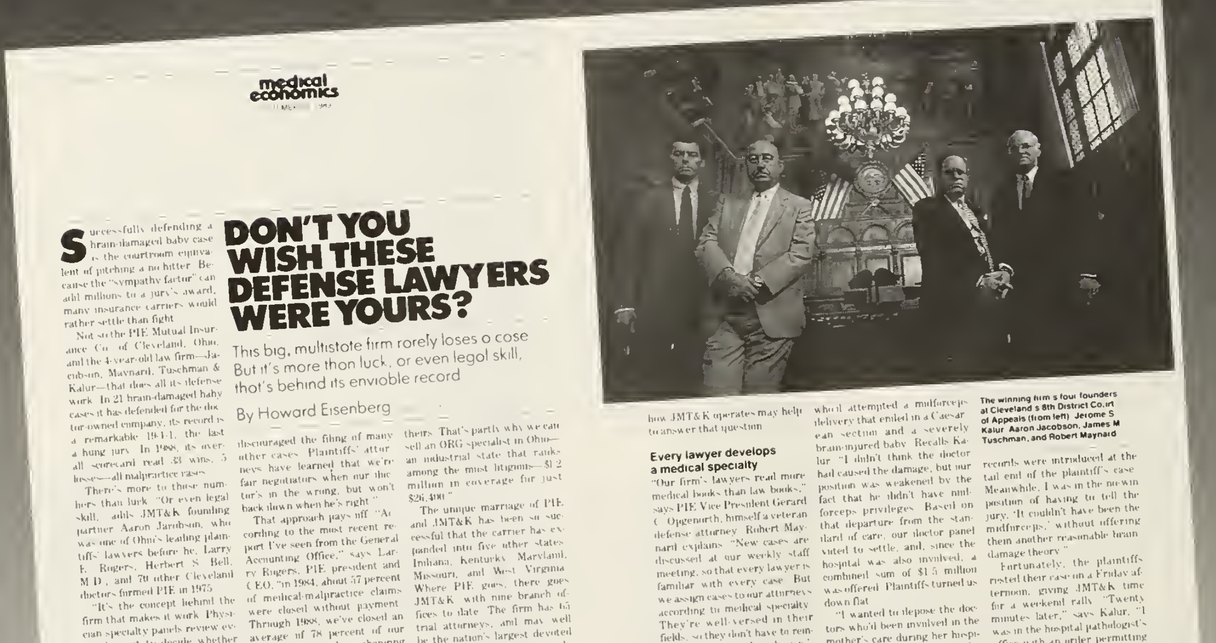

medical economics

DON'T YOU WISH THESE DEFENSE LAWYERS WERE YOURS?

This big, multistate firm rarely loses a case. But it's more than luck, or even legal skill, that's behind its enviable record

By Howard Eisenberg

Successfully defending a brain-damaged baby case is the courtroom equivalent of pitching a no-hitter. Because the "sympathy factor" can add millions to a jury's award, many insurance carriers would rather settle than fight.

Not so the PIE Mutual Insurance Co. of Cleveland, Ohio, and the 4-year-old law firm—Jacobson, Maynard, Tuschman & Kalur—that does all its defense work. In 21 brain-damaged baby cases it has defended for the doctor-owned company, its record is a remarkable 19-1-1, the last a hung jury. In 1988, its overall scorecard read 33 wins, 5 losses—all malpractice cases.

There's more to those numbers than luck. "Or even legal skill," adds JMT&K founding partner Aaron Jacobson, who was one of Ohio's leading plaintiffs' lawyers before he, Larry E. Rogers, Herbert S. Bell, M.D., and 70 other Cleveland doctors formed PIE in 1975.

"It's the concept behind the firm that makes it work. Physician specialty panels review every lawsuit to decide whether the defendant deviated significantly from the standard of care. If he did, we pay. If he didn't, we defend. Makes no difference whether it's a $5,000 or a $5 million case. We label it 'No pay.' That policy has resulted in a lot of cases being dropped. Perhaps more important, it's discouraged the filing of many other cases. Plaintiffs' attorneys have learned that we're fair negotiators when our doctor's in the wrong, but won't back down when he's right."

That approach pays off. "According to the most recent report I've seen from the General Accounting Office," says Larry Rogers, PIE president and C.E.O., "in 1984, about 57 percent of medical-malpractice claims were closed without payment. Through 1988, we've closed an average of 78 percent of our cases without a dime changing hands. And it's my understanding that, without including defense costs, St. Paul Fire and Marine Insurance Co.'s 1988 average gross payout for cases closed in Ohio with payment was $52,500. Our comparable figure was about $10,000 below theirs. That's partly why we can sell an OBG specialist in Ohio—an industrial state that ranks among the most litigious—$1.2 million in coverage for just $26,400."

The unique marriage of PIE and JMT&K has been so successful that the carrier has expanded into five other states: Indiana, Kentucky, Maryland, Missouri, and West Virginia. Where PIE goes, there goes JMT&K, with nine branch offices to date. The firm has 65 trial attorneys, and may well be the nation's largest devoted well-nigh exclusively to medical-malpractice defense.

Could the insurer-defender symbiosis, if duplicated by other doctor companies, make a significant contribution to reducing malpractice litigation nationwide? An up-close look at how JMT&K operates may help to answer that question.

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The winning firm's four founders at Cleveland's 8th District Court of Appeals (from left): Jerome S. Kalur, Aaron Jacobson, James M. Tuschman, and Robert Maynard

Every lawyer develops a medical specialty

"Our firm's lawyers read more medical books than law books," says PIE Vice President Gerard C. Oppenorth, himself a veteran defense attorney. Robert Maynard explains: "New cases are discussed at our weekly staff meeting, so that every lawyer is familiar with every case. But we assign cases to our attorneys according to medical specialty. They're well-versed in their fields, so they don't have to reinvent the wheel with each case."

Last year, the firm's OBG specialist, attorney Jerome S. Kalur, who had won 16 consecutive brain-damaged baby cases, faced one of his toughest challenges when he defended a GP who'd attempted a midforceps delivery that ended in a Caesarean section and a severely brain-injured baby. Recalls Kalur: "I didn't think the doctor had caused the damage, but our position was weakened by the fact that he didn't have midforceps privileges. Based on that departure from the standard of care, our doctor panel voted to settle, and, since the hospital was also involved, a combined sum of $1.5 million was offered. Plaintiffs turned us down flat.

"I wanted to depose the doctors who'd been involved in the mother's care during her hospitalization, but the attorney for the plaintiff baby insisted it would violate the mother's physician-patient confidentiality. That privilege would terminate automatically when her medical records were introduced at the tail end of the plaintiff's case. Meanwhile, I was in the no-win position of having to tell the jury, 'It couldn't have been the midforceps,' without offering them another reasonable brain damage theory."

Fortunately, the plaintiffs rested their case on a Friday afternoon, giving JMT&K time for a weekend rally. "Twenty minutes later," says Kalur, "I was in the hospital pathologist's office with an order permitting me to view the mother's placental slides." Meconium staining had been charted, and Kalur had a hunch that fetal distress had begun long before the for-

3

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So this winter, do something to really protect your child during flu season.

Learn the symptoms of diabetes.

A message from the
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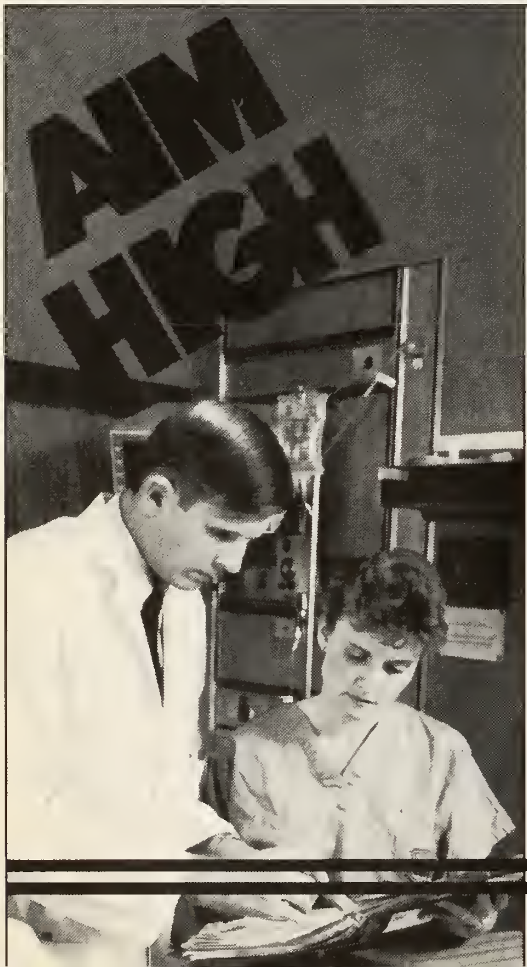

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The American Medical Association
on behalf of member physicians and their patients.

A message from The American Medical Association for the Health Access America Proposal

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